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ABSTRACT

This report presents the latest available racial and ethnic data concerning high school completion rates, college participation rates, college enrollments, and degree completions. It also presents projections on the numbers of high school graduates, from a study conducted by the Western Interstate Commission for Higher Education and the College Board, as well as analyses of the number of new doctorates who entered academia during the 1980s and the proportions of new faculty hires from different racial and ethnic groups. Among other findings the data reveal that: (1) in 1990, the Hispanic high school completion rate was 54.9 percent, 20 points below the rate for African Americans and nearly 30 points behind the rate for Whites; (2) about 22 states are expected to have declines in African American high school graduates by 1995; (3) between 1988 and 1990, minority enrollment in postsecondary education increased 10 percent, compared with a 5.1 percent increase in total enrollment; (4) African Americans and Hispanics earned fewer undergraduate engineering degrees in 1989 than in 1987, and African American men received fewer degrees in education, health, and life science at the bachelor's level; and (5) minorities increased their share of full-time positions in higher education from 17.7 percent in 1979 to 20.3 percent in 1989. (GLR)

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Minorities in Higher Education

Deborah J. Carter
Reginald Wilson

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1991
Tenth Annual
Status Report

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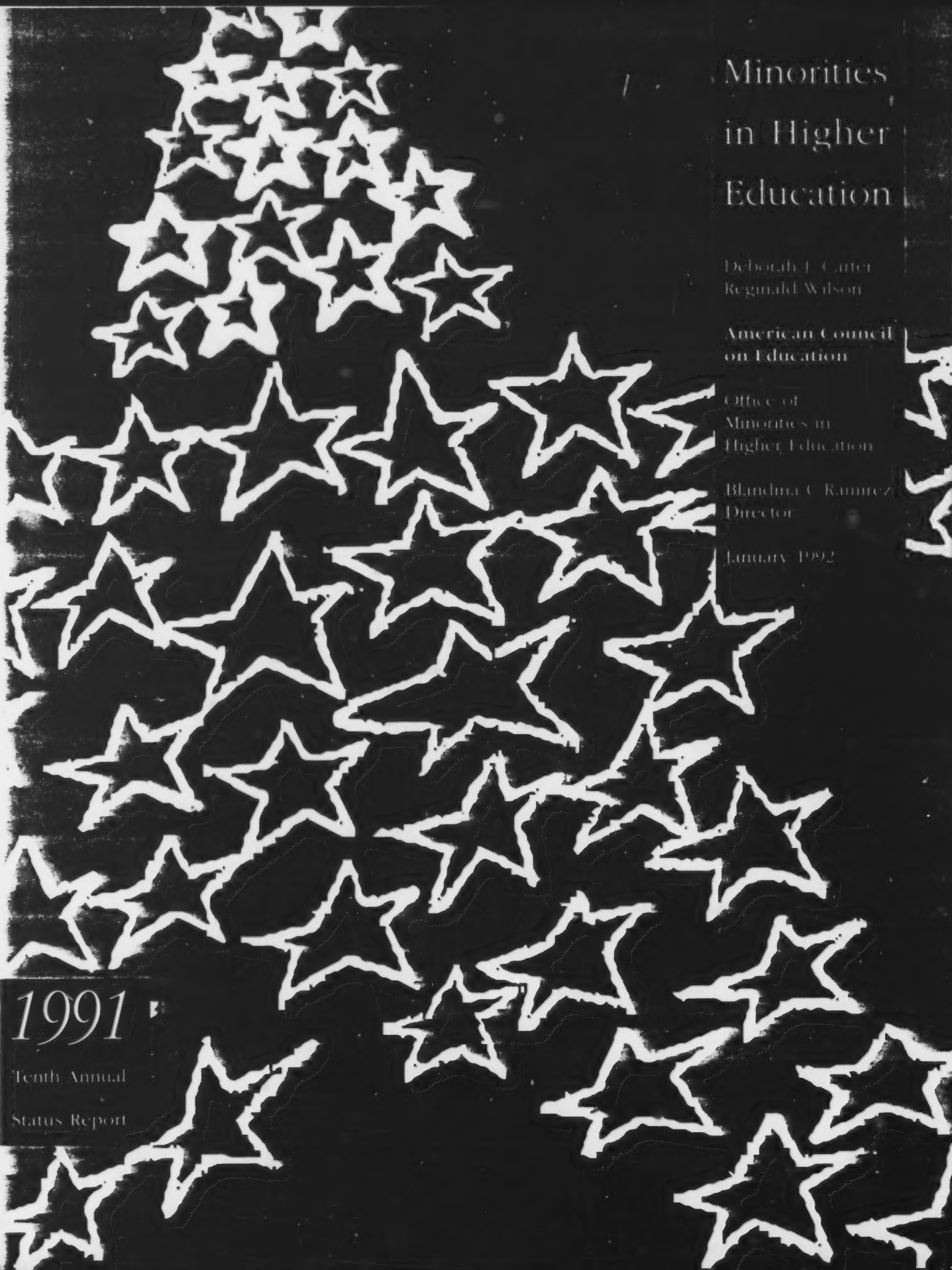

Minorities in Higher Education

Deborah J. Carter
Reginald Wilson

American Council on Education

Office of Minorities in Higher Education

Blandina C. Ramirez
Director

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Tenth Annual

Status Report

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The Office of Minorities in Higher Education of the American Council on Education is pleased to issue the Tenth Annual Status Report on Minorities in Higher Education. This report has become an integral part of the Council's effort to inform our constituency of significant trends and issues for minorities. Your comments and suggestions on ways to improve the report are always welcomed.This report would not have been possible without the support of Lachone Fuquay, Charles Dervarics, Eileen O'Brien, Boichi San, and Em Claire Knowles. Special thanks are also extended to those who served as reviewers, especially Charles Andersen, Elaine El-Khawas, Art Hauptman, David Merkowitz, Cecilia Ottinger.

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Foreward

This is the tenth *Annual Status Report on Minorities in Higher Education* released by the Office of Minorities in Higher Education (OMHE) of the American Council on Education (ACE). This year's report presents the latest available racial and ethnic data on high school completion rates, projections of high school graduates, college participation rates, college enrollments, and degree completions. As in prior years, the major data sources for this report include the U.S. Bureau of the Census' *Current Population Reports* and the Higher Education General Information and Integrated Postsecondary Education Data System survey reports of the U.S. Department of Education's National Center for Education Statistics (NCES). This year's report also presents projections on the numbers of high school graduates, from a study conducted by the Western Interstate Commission for Higher Education and the College Board.

Once again, OMHE must point out that because data from the U.S. Census Bureau on school and college enrollments for Asian Americans and American Indians are not available annually, annual high school completion rates and college participation rates for these groups cannot be calculated. Again we stress the need for such data and encourage the federal data collection systems to improve annual national data collection efforts to monitor the college-going patterns of all racial and ethnic groups.

Equally important, state higher education coordinating and governing boards must ensure that institutional racial and ethnic college enrollment and earned degree data are collected and reported annually to the U.S. Department of Education. Because of nonreporting and underreporting of 1990 data on two-year college enrollment in five states, approximately 34 percent of the 1990 national data for two-year colleges had to be estimated.[1] This is particularly troublesome since colleges and universities are under federal mandate from the U.S. Department of Education's Office of Civil Rights to report these data.

This year's special focus is on racial and ethnic employment trends in higher education, with particular attention given to the employment status and representation of Asian American, African American, American Indian, and Hispanic faculty on college and university campuses during the 1980s. In an effort to provide more information relative to minority faculty supply and demand issues, the report also includes some cursory analyses of the number of new doctorates who entered academe during the 1980s, as well as the proportions of new faculty hires from different racial and ethnic groups.

Executive Summary

High School Completion Rates

▪ From 1989 to 1990, high school completion rates showed little change for whites and African Americans, but declined slightly for Hispanics. In 1990, the completion rate for Hispanics was 54.9 percent, more than 20 points below the rate for African Americans and nearly 30 points behind the rate for whites.

▪ African American and Hispanic men showed slight gains in 1990, while women in those groups experienced a slight decline, thereby reducing the gender gap evident in both groups during the 1980s. The gap in 1990 between men and women was 2 percent for African Americans, down from 7 percent in both 1988 and 1989. The gap among Hispanics was the lowest since 1973, the last year in which Hispanic men graduated at a higher rate than Hispanic women.

Projections of High School Graduates

▪ Between 1986 and 1995, the total pool of minority high school graduates will increase, but only Hispanics and Asian Americans are expected to achieve sustained annual growth during the period. By 1995, the number of Asian and Latino high school graduates will increase 58 and 52 percent, respectively, while the number of African American graduates will decline by 2.6 percent.

▪ An estimated 22 states are likely to experience a decline in African American high school graduates by 1995, led by those in the northeast and north central regions. By comparison, states in the West will post the largest increases for Hispanic and Asian American high school graduates.

College Participation and College Enrollment Trends

▪ African Americans have made some gains in college participation since 1985 but have not reduced the gap between their rate and the rate for whites. Data for 1990 show a 39.4 percent participation rate for white high school graduates aged 18 to 24, compared with 33 percent for African American graduates and 29 percent for Hispanic graduates. Low rates of high school completion also continue to hinder Hispanic progress toward college.

▪ More minorities enrolled in higher education from 1988 to 1990, with moderate progress among all groups. Between 1988 and 1990, minority enrollment increased 10 percent, compared with a 5.1 increase in total enrollment. Overall, minorities showed the largest gains at four-year institutions.

▪ African American men contributed to this increase in higher education enrollment, with a gain of 7.4 percent during the period. This increase enabled African American men to surpass their previous high mark for enrollment, recorded in 1980.

Degrees Conferred

▪ Minorities began to return to social science, posting a 19 percent increase in degrees at the baccalaureate level from 1987 to 1989. This figure included moderate gains for African Americans and large increases for Hispanics and Asian Americans. At the same time, interest waned somewhat in baccalaureate business degrees after all groups showed significant gains during the late 1970s and early 1980s.

▪ African Americans and Hispanics earned fewer undergraduate engineering degrees in 1989 than in 1987, led by an 8.9 percent decline for African American men. African American men also received fewer degrees in education, health, and life science at the bachelor's level.

▪ Asian Americans posted moderate to large gains in the

Photo credit: Leon Gurley, University of the District of Columbia

number of master's degrees awarded in the six major fields from 1987 to 1989. The number of awards to Hispanics and African Americans remained largely unchanged.

Special Focus: Racial and Ethnic Trends in Academic Employment

- As college and university enrollments and the number of institutions expanded during the 1970s and 1980s, employment in higher education also grew. Between 1979 and 1989, the number of full-time higher education employees increased from 1.5 to 1.8 million.

- As a monolithic group, minorities increased their share of full-time positions in higher education from 17.7 percent in 1979 to 20.3 percent in 1989. However, employment growth was extremely uneven among different racial and ethnic groups.

- Although minorities made gains in higher education employment, Hispanics, African Americans, and American Indians continue to hold disproportionately higher shares of nonfaculty and nonmanagement positions than do white men. This is particularly true for all women of color, and for white women as well.

- During the 1980s, Asian Americans became the largest minority faculty group, outpacing African Americans in full-time faculty appointments. In 1989, Asian Americans held 4.7 percent of all faculty appointments compared, with 4.5 percent for African Americans. However, 40 percent of all faculty members in this group are non-U.S. citizens. This means that Asian Americans who are U.S. born or naturalized citizens comprise only about 2.8 percent of higher education faculty.

- American Indian faculty continue to be a rarity. In 1989, only 1,498 or 0.3 percent of all faculty were American Indians or Alaskan Natives. Like Hispanics and African Americans, American Indians remain concentrated within faculty positions at the bottom of the professional ladder. This trend remained constant during the 1980s, particularly for women in this group.

- Between 1979 and 1989, African American faculty made no progress in increasing their faculty representation. Nearly half of all African American faculty are employed in historically Black colleges and universities (HBCUs), which means that only 2.3 percent of the faculty at predominantly white campuses are African Americans.

- During the 1980s, Hispanic faculty made a slight gain in their share of faculty appointments, moving from 1.5 percent of all faculty in 1979 to 2 percent in 1989. Large proportions of Hispanic faculty are employed at two-year institutions and at institutions with 25 percent or more Hispanic enrollment.

- The tenure rates of minority faculty continue to be lower than that of whites. Women of all racial and ethnic groups receive tenure at rates 10 to 16 percentage points lower than their male counterparts.

- African Americans and Hispanics made progress in increasing their respective shares of administrative positions. Minority women made larger gains at this level than minority men. While Asian Americans have made sizeable gains within the faculty ranks, they remain tremendously underrepresented within higher education administration.

High School Completion Rates

This section examines the most recent high school completion (HSC) rates for white, African American, and Hispanic 18-to-24-year-olds nationwide. Taken from the Census Bureau's 1990 Current Population Survey (CPS), the data include students who earned either a high school diploma or an equivalency such as a General Equivalency Diploma (GED) certificate.

The 1990 CPS shows a slight increase in completion rates for whites and African Americans but a slight decrease for Hispanics. As Table 1 shows, the slight gains for whites and African Americans were due primarily to higher completion rates among men. Hispanic men also recorded a marginal increase, reducing the wide gender gap for both minority groups (Table 2).

Among African Americans, 77 percent of 18-to-24-year-olds completed high school as of 1990, up 1 percent from the previous year. Since 1970, the HSC rate among African Americans has increased by more than 17 percentage points. After a period of stagnation and then decline in the 1980s, African Americans registered their second consecutive increase in 1990. The latest figure also eclipses the previous high mark of 76.5 percent in 1986 (Table 1).

Whites had a completion rate of 82.5 percent for 1990, showing little change from 1989. The rate for whites has remained in the range of 81 percent to 83 percent since 1970, while African Americans have slowly closed the gap between the two races.

In 1990, the HSC rate for Hispanics dropped slightly to 54.5 percent, the third decline in the last five years. The rate for Hispanics remains the lowest of the three groups and has not improved markedly since 1970. With the latest decrease, the 1990 completion rate is actually below the 55.2 percent registered for Hispanics in 1973. It also is a full 8 points shy of the high mark of 62.9 percent Hispanics reached in 1985.

A Declining Gender Gap?

Since the 1970s, women have posted higher completion rates then men among all groups, with the largest gaps evident among African Americans and Hispanics. During the 1980s, this gender gap ranged from 6 to 10 percent for African Americans and 4 to 9 percent among Hispanics (Table 2). The figures for 1990, however, show some improvement for men and a decline for women.

The HSC rate for African American men increased slightly from 72.2 percent in 1989 to 75.9 percent in 1990. At the same time, the rate for women dropped slightly from 79.3 percent to 77.8 percent. The resulting 2 percent gender gap is the smallest since 1973 and far below the 7 percent gap registered in 1988 and 1989. It should be noted, however, that statistical data from CPS may vary from year to year. The figures cited here are national aggregates, and actual rates for urban and rural areas may be lower for some groups.

Among Hispanics, the completion rate for men held about the same, at 52.5 percent in 1989 and 53.7 percent in 1990. But the rate for Hispanic women took a sizable drop, from 59.8 percent in 1989 to 55.3 percent in 1990, creating the smallest gender gap recorded since 1973.

White men also registered a slight increase in high school completion, from 79.9 percent in 1989 to 81.1 percent in 1990. The rate for white females remained constant at 83 percent.

Overall, the Census information shows a completion rate of 80.6 percent for men in 1990, up 2 percent from 1989. The completion rate for women held steady at 83 percent.

High School Completion Estimates for American Indians and Asian Americans

The annual CPS does not include HSC rates for American Indians and Asian Americans. The 1990 Census will provide a one-time snapshot of rates for these two groups, but this

information is not yet available. Therefore, this section relies primarily on data from the 1980 Census and the High School and Beyond (HSB) longitudinal survey.

The Census reported that 56 percent of American Indians and Alaskan Natives over age 25 had completed four or more years of high school in 1980. This figure compared to a rate of 66.5 percent for the entire U.S. population that year.[2] Data also show considerable fluctuation according to the particular Indian reservation. Overall, fewer than half of all adults at the 10 largest reservations had earned a diploma in 1980.[3]

The HSB survey also showed American Indian high school sophomores were less likely to complete school than students of other races. Only 67 percent of 1980 American Indian sophomores graduated in 1982, compared to rates of 93 percent for Asian Americans, 86 percent for whites, 78 percent for African Americans, and 72 percent for Hispanics.

Both HSB and Census data show high completion rates for Asian Americans. Based on Census data, more than 70 percent of Asian American women and 80 percent of men over 25 years of age had finished high school as of 1980.[4] The HSB also found higher completion rates for Asian Americans than other racial and ethnic groups.

But the aggregate data for Asian Americans also mask specific problems experienced by some Asian subgroups. Census has reported lower high school completion rates for students from Southeast Asia and the Philippines than for students of Japanese and Chinese ancestry.[5] Also, while 1980 Census data showed that 67 percent of Americans graduated from high school, only 22.3 percent of the Hmong American population and 31.4 percent of Laotian Americans could make that claim.

Projections of Public High School Graduates

This section of the report relies on data from the Western Interstate Commission for Higher Education (WICHE) and the College Board, which collected birth, grade enrollment, and graduation data as part of a high school graduation projections project begun in 1987. Their projections cover the period 1986 to 1995 and focus only on public school graduates, excluding the 11 percent of American students who graduate from private high schools.[6]

These data differ from the actual HSC rates for 1990 and past years that were profiled in the last chapter. HSC rates list the proportion of 18-to-24-year-olds who graduate from a public or private high school or earn a GED. HSC data also contain a small number of persons enrolled in two-year colleges who have not completed high school or earned an equivalency.

The projections from WICHE and the College Board show that minorities will make up a larger share of the nation's high school graduates by the mid-1990s (Table 3). But this increase, though significant, will not be shared equally among all groups. These data indicate that the number of African American, Hispanic, Asian American, and American Indian high school graduates increased between 1986 and 1989. Yet the data also show that only Hispanics and Asian Americans expect to report sustained annual growth through 1995.

Nationwide, WICHE predicts that the number of public high school graduates will decline 3.5 percent from 1986 to 1995. Whites will account for much of the decrease. The number of white high school graduates is projected to drop by 10 percent between 1986 and 1995. WICHE also predicts a 2.6 percent decline for African Americans during the period. By contrast, the number of Latino high school graduates will increase by 52 percent, while Asian American high school graduates will net a 58 percent increase and American Indians an 11 percent gain.

These fluctuations will bring about some fundamental changes in the racial and ethnic composition of America's high school graduates. On average, whites represented 78 percent of the total in 1986 but will account for only 72 percent in 1995. Latinos will increase their share from 6 percent to 9 percent and the proportion of Asian Americans will jump from 2.6 percent to 4 percent.

Despite a slight decline in numbers, African Americans will continue to account for about 13 percent of all high school graduates in 1995. Although the number of American Indian graduates will increase, they will continue to represent only about 1 percent of all graduates in the mid-1990s.

Overall, minorities represented 535,230, or 22.4 percent, of the nation's 2.3 million high school graduates in 1986 (Table 3). They are expected to break the 600,000 barrier by 1993 even as the total pool of graduates declines. WICHE then projects continued growth in the number of minority graduates through 1995, when 638,160 minority graduates will represent 27.7 percent of the nation's total.

Despite these signs of progress, projections for some minority groups show wide fluctuations from year to year. For example, the pool of African American graduates actually increased 3 percent from 1986 to 1989, moving from 316,350 to 326,690. Yet projections indicate a 6 percent decline thereafter. The number of African American graduates is expected to drop to a low of 291,460 in 1992 before rebounding to 308,120 by 1995 (Table 3).

The number of American Indian graduates also is expected to fluctuate from year to year. American Indians registered a 7 percent increase from 1986 to 1989, moving from 16,750 to 18,010 public high school graduates. Forecasters project a decrease for 1991 and a modest recovery by 1994. A major increase is projected for 1995, when 18,660 American Indians will graduate from high school—the highest mark for the 10-year period.

By contrast, WICHE projects steady growth for Hispanics in increments of 5,000 to 10,000

students per year. Overall, the number of Hispanic graduates is expected to jump from 140,040 in 1986 to 213,290 by 1995. A similar forecast is projected for Asian Americans, whose ranks increased 25 percent from 1986 to 1990. Data suggest a growth rate of another 21 percent by 1995.

Regional Trends: African Americans

Nationwide, 22 states are expected to report a drop in the number of African American high school graduates, led by those in the northeast and north central regions. The northeast faces the prospect of a 12 percent decline, from 68,500 in 1986 to 60,500 by 1995. The region is projected to reach a low of 56,620 in 1992 before beginning a modest recovery in the succeeding three years (Table 3). The largest decline—30 percent—is expected in the District of Columbia. Pennsylvania follows with a projected 18 percent drop, with New Jersey and Rhode Island close behind at 16 percent. In north central states, Michigan has the largest drop: 16 percent.

South/south central states boast the largest number of African American high school graduates and will experience relatively few changes through 1995. Overall, changes amount to a 1 percent increase for the 10-year period. African Americans continue to represent only a small percentage of high school graduates in western states, yet their ranks are expected to increase 5 percent by the mid-1990s.

Regional Trends: Hispanics

Two states—California and Texas—continue to graduate more than half of the nation's Hispanic youth. Yet all four regions are expected to report small to moderate increases in Hispanic graduates through 1995. (For this section, WICHE lists Texas and Oklahoma in the south/south central region; other states in the southwest are included with the West region.)

The largest increase is expected in the West, where 61,250 Hispanics graduated in 1986 and 101,350 are projected to graduate in 1995 (Table 3). The 65 percent increase includes steady growth every year. Forecasters also predict growth of 51 percent in the south (which includes Texas), from 46,500 to 70,050.

Despite a smaller base of Hispanic students, north central states will undergo a 41 percent increase in high school graduates by 1995. Slow but steady growth also is forecast in the northeast, where Hispanic graduates are expected to make a 24 percent increase.

Nationwide, only eight states

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expect a decline in Hispanic graduates during the period: Delaware, Iowa, Maryland, Missouri, Montana, Nebraska, Ohio, and Rhode Island. By contrast, a number of small states will see their share of Hispanic graduates triple by 1995. These states include South Carolina, New Hampshire, West Virginia, and Vermont, as well as the District of Columbia.

Regional Trends: American Indians

All regions reported an increase in the number of American Indian graduates from 1986 to 1989, and most projections show continued growth in the 1990s. In the West, the number of graduates rose 6.5 percent through 1989. Projections then show little or no growth for the region until a large jump in 1995. Solid growth that year will enable American Indians to post a 16 percent increase for the period.

South/south central states reported a modest 4 percent increase from 1986 to 1989 before beginning an expected four-year decline. Forecasters predict the region will not recover until 1995, when it finally will surpass the 1989 figure. A similar pattern is expected in north central states, where 2,900 graduated in the 1985-1986 year and only 3,000 are projected to graduate by 1995 (Table 3).

Northeast states reported only 660 American Indian graduates in 1986. This region is projected to reach a high of 920 by 1992 before falling to 800 by the end of the 10-year period.

Regional Trends: Asian Americans

The number of Asian Americans graduating from high school is expected to climb steadily through 1995, with all regions contributing to the increase. More than half of all Asian American graduates live in the West, a trend that will continue through the mid-1990s. The West accounted for 36,740 graduates in 1986 and 44,380 by 1989 (Table 3). Forecasters predict steady growth to 55,420 graduates by 1995, for a 51 percent increase during the period.

The northeast region is a distant second in the number of Asian American graduates, but these states will experience a dramatic 78 percent increase in graduates through 1995. From a base of 10,700 in 1986, the number of Asian American graduates rose to 14,080 by 1989. Steady growth of from 600 to 1,000 graduates is predicted annually, with a final projection of 19,070 at the end of the period.

Southern and north central states have the smallest numbers of Asian American graduates, but forecasters predict continued growth in these regions as well. From 7,930 in 1986, the number of graduates in the south will nearly double to 13,590 by 1995. In north central states, 6,730 Asian Americans graduated from high school in 1986 and 10,010 are expected by 1995—a jump of 49 percent.

Graduates Who Enroll in College

Although recent data and future projections show more minorities graduating from high school, many of these students are not moving on to postsecondary education. This trend is particularly true for African Americans and Hispanics, who enroll in college at much lower rates than whites.[7] There are no corresponding data from WICHE for Native Americans and Asian Americans.

In 1988, 64 percent of 18-year-old African Americans graduated from high school, but only 29 percent were enrolled in college.[8] Among Hispanics that year, 48 percent graduated from high school, and just 27 percent were enrolled in a postsecondary program. By contrast, whites registered a higher graduation rate (71 percent) and college enrollment rate (43 percent).

Of those who did attend college, African Americans and Hispanics also relied heavily on the nation's two-year colleges. In 1988, 47 percent of African American and 61 percent of Hispanic first-time freshmen attended two-year schools.[9] Overall, African Americans represented just 10.3 percent of first-year freshmen at four-year colleges and universities in 1988.[10] Hispanics accounted for only 4 percent.

College Participation Rates

College Participation Rates

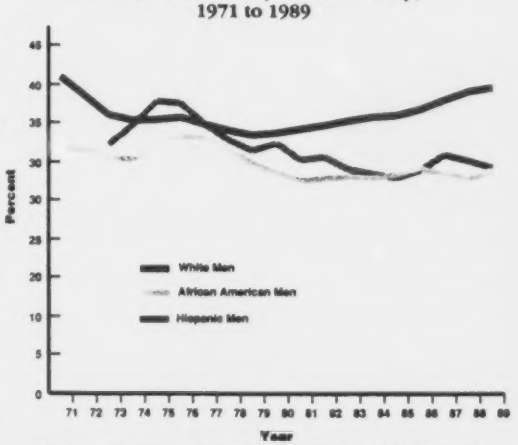
College participation rates are an important barometer of the success of minorities in higher education. Unlike enrollment figures, which provide a snapshot of attendance at one period of time, participation rates give researchers the ability to track the current enrollment and recent college attendance patterns of a given age group—in this case, youth ages 18 to 24.

These rates are available in three forms: the percentage of all 18-to-24-year-olds enrolled in college; the percentage of high school graduates ages 18 to 24 enrolled in college; and the percentage of graduates ages 14 to 24 who either are enrolled in college or have completed one or more years of study. This last category is also known as the "ever-enrolled-in-college" rate.

This report takes most of its information from the college participation rates reported in the Census Bureau's CPS. But CPS data usually provide only a general outline of participation rates and should be viewed with caution.[11] Because CPS uses the 1980 Census as its base year, it may underestimate gains of some groups with above-average growth during the 1980s and overestimate participation among groups whose growth was slower than expected.[12]

With that in mind, ACE also has computed three-year moving averages for the enrolled-in-college participation rate of high school graduates from 1971 to 1989 (Figures 1 and 2). These averages are designed to smooth out year-to-year statistical variations that often appear with small population samples. ACE calculated these averages by comparing the CPS enrolled-in-college rate for a given year against the rate for the previous year and the following year. For example, the moving average for 1989 is the sum of the enrolled-in-college rates for 1988, 1989, and 1990, divided by three.

Figure 1
Three-year Moving Averages of Enrolled-in-College Participation Rates for 18-to-24-Year Old Male High School Graduates by Race/Ethnicity, 1971 to 1989



Source: U.S. Department of Commerce, Bureau of the Census, Current Population Reports and unpublished tabulations for October 1990. Moving averages were calculated by the American Council on Education's Office of Minorities in Higher Education, December 1991.

Note: Enrolled-in-college participation data for Hispanics are not available prior to 1972; therefore, three-year moving averages were calculated for 1973 and later.

No corresponding data from the Census Bureau are available for American Indians and Asian Americans. For that section, this report will use data from the U.S. Department of Education's HSB longitudinal survey.

Overall, the CPS data reflect a substantial drop in the number of American college-age youth from 1980 to 1990. The number of 18-to-24-year-old youths fell 14 percent during the decade, including a 16.7 percent drop among whites (Table 1). African Americans also recorded a decrease of 5.4 percent. By contrast, the number of Hispanics in this age category increased 35.2 percent during this period.

Yet data show that whites are much more likely than African Americans or Hispanics to participate in higher education. In 1990, 32.5 percent of all white 18-to-24-year-olds were enrolled in college, compared to 25.4 percent for all African Americans and 15.8 percent for all Hispanics.

Similar gaps are evident in the ACE moving averages of college participation by high school graduates. This gap stands in striking contrast to the relative parity in the participation rates of whites, African Americans, and Hispanic graduates during the 1970s. The gap in college participation between the races, however, is primarily a phenomenon of the 1980s that continues today.

African Americans

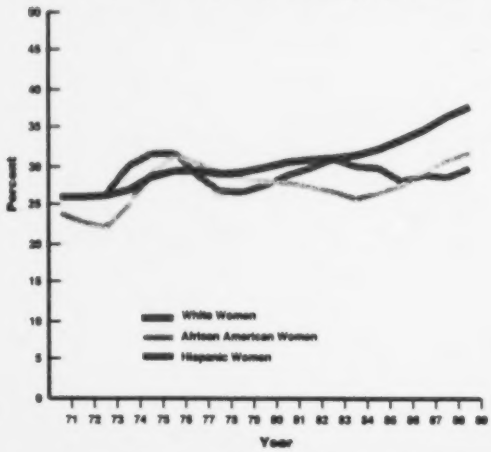
African Americans have made some gains in college participation since 1985, yet they have not significantly reduced the gap between their rates and the rates of whites. In 1990, 33 percent of 18-to-24-year-old African American high school graduates were enrolled in college, up from 26 percent in 1985 (Table 1). The rate for white graduates increased 5 points to 39.4 percent during the same period.

ACE moving averages also show significant gaps in the college participation patterns of white and African American men. The participation rate for white male high school graduates increased slightly from 1985 to 1989, while the rate for African American males remained constant (Figure 1). In 1989, the rate for white men was 39.7 percent, compared to 29 percent among African American men.

African American women posted a 5 percent gain in participation rates among high school graduates from 1985 to 1989, the moving averages show (Figure 2). Yet white females also achieved a similar increase during the same period, leaving a 6 percentage point gap in the participation rates between the two races.

African American women showed more progress in participation than African American men during the late 1980s. The moving averages for male high school graduates hovered at 28 percent to 29 percent during the period, while the rate for female high school graduates moved from 27 percent to 32 percent. Before 1986, a larger share of African American male high school graduates were enrolled in college than their female counterparts.

Figure 2
Three-year Moving Averages of Enrolled-in-College Participation Rates for 18-to-24-Year Old Female High School Graduates by Race/Ethnicity, 1971-1989



Sources: U.S. Department of Commerce, Bureau of the Census, Current Population Reports and unpublished tabulations for October 1990. Moving averages were calculated by the American Council on Education's Office of Minorities in Higher Education, December 1991.

Note: Enrolled-in-college participation data for Hispanics are not available prior to 1972; therefore, three-year moving averages were calculated for 1973 and later.

African Americans also trailed whites considerably in the "ever-enrolled-in-college" rate, the percent of 14-to-24 year-old high school graduates who are currently enrolled or who have finished one or more years of study. The rate for African Americans stood at 48 percent in 1990, up from 44 percent in 1985. But the rate for whites reached 60 percent in 1990, up from 55 percent in 1985.

For African American men, the "ever-enrolled" rate was 48.9 percent in 1990, a small increase from 1989 and 5 percentage points higher than in 1985. African American women had an "ever-enrolled" rate of 47 percent in 1990, up from 44 percent in 1985. Yet the rate for African American women showed some fluctuation during the five-year period, with rates ranging from 44 percent to 51.8 percent.

Photo credit: Gary G. Dineen, Marquette University

Hispanics

Similar to the experience of African Americans, Hispanics made considerable progress during the 1970s in their overall college-going rates only to see those gains

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vanish a decade later. In 1976, Hispanics actually outstripped whites in college participation among high school graduates. By 1990, however, whites enjoyed an advantage of 10 percentage points (Table 1).

Recent trends also show little progress for this group from 1985 to 1990. ACE moving averages show only a 1 percent increase in the participation rate among Hispanic men, while the rate for women showed no change (Figures 1 and 2). In fact, participation rates among Hispanic men and women are nearly identical. In 1989, the moving average for men was 29.3 percent, compared to 29.9 percent among women.

Low rates of high school completion among Hispanics have contributed to this problem. When looking at all 18-to-24-year-olds—including nongraduates— Hispanics fare even worse against whites and trail African Americans as well. Data show that only 15.8 percent of all young Hispanics enrolled in college during 1990. This figure compares to 25.4 percent for African Americans and 32.5 percent for whites (Table 1).

Hispanics also ranked behind whites and African Americans in the "ever-enrolled-in-college" participation rate, posting a decline from 1985 to 1990. For Hispanics, the ever-enrolled rate during the period dropped from 46.7 percent to 44.7 percent (Table 1). By comparison, the rate for whites increased from 55 percent to 60 percent, and African Americans made a gain from 44 percent to 48 percent.

Hispanic men had an "ever-enrolled" rate of 46.5 percent in 1990, a four-point gain from 1989 but only a small increase from the 44.9 percent registered in 1985. Hispanic women posted an "ever-enrolled" rate of 43 percent, down slightly from the previous year and a 5 percentage point drop from 1985. The "ever-enrolled" rate for Hispanic women has declined for four of the past five years.

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College Enrollment Trends

Unlike minority college participation rates, the actual number of minorities enrolled in higher education increased through the 1980s, culminating in a 10 percent gain from 1988 to 1990. These figures are reported by NCES, whose information is the basis for the findings in this section of the report. NCES takes its data from the Higher Education General Information Survey and the Integrated Postsecondary Education Data System fall enrollment surveys.

All minority groups played a role in this increase from 1988 to 1990, with each group showing a jump of from 8 percent to 12 percent (Table 4). Enrollment among African American men also increased 7 percent during this period as they surpassed the previous high enrollment mark recorded back in 1980. Bucking earlier trends, minorities also showed the largest increases at four-year colleges and universities.

Overall, the nation posted a gain of 5.1 percent in college enrollments from 1988 to 1990 (Table 4). Nationwide, two-year colleges showed an increase of 6.4 percent during the period,[13] compared to 4.3 percent at four-year schools. The 10 percent gain among minorities far outpaced the increase of 3.8 percent recorded by whites. Data also show that women made slightly larger gains than men, and enrollment in graduate institutions grew at a faster rate than enrollment at the undergraduate and professional levels.

Photo credit: Rochester Institute of Technology

African Americans

African American women showed considerable progress in enrollment during the 1980s, posting an increase of 16 percent during the decade. In addition, African American men made a strong showing in the period from 1988 to 1990, reversing a downward trend for the previous eight years (Table 5). African American men showed an enrollment gain of 7.4 percent during the 1988-1990 period, which came close to matching the 8.7 percent gain among women in the same time frame. With 476,000 enrolled during 1990, African American men topped their previous high of 464,000 in 1980 (Table 4).

As a group, African Americans also showed the largest increases at four-year institutions. Data show an increase of 9 percent at four-year schools from 1988 to 1990, compared to a 7.6 percent jump for two-year institutions (Table 4). Gains at four-year schools have occurred steadily through the late 1980s, with a 16 percent gain since 1986. Between 1988 and 1990, African Americans also showed a 9.3 percent gain recorded at independent institutions (Table 5).

Although they remain underrepresented in many fields, African Americans posted a gain of 14.3 percent at professional schools from 1988 to 1990 (Table 6). This jump exceeded the 11.1 percent increase recorded by Hispanics. African Americans also made gains at the undergraduate and graduate levels but trailed Hispanics and Asian Americans in these categories. Still, the enrollment data show gains of 8.2 percent at the undergraduate level and 10.5 percent at the graduate level for African Americans during the 1988-1990 period (Table 6).

Enrollment of African Americans at HBCUs also increased from 1988 to 1990. Enrollment figures show gains of 7.6 percent for African Americans at HBCUs, which is nearly identical to the 8 percent growth recorded by African Americans at non-HBCU schools

Photo credit: Steve Harlin, Temple University

during the period (Table 7). These new statistics reflect a change from the 1986-to-1988 period noted in last year's report, when African Americans showed more than twice as much enrollment growth at HBCUs than at other colleges.[14]

Overall, the number of African American men at HBCUs increased 6.2 percent from 1988 to 1990, and the number of women enrolled jumped 8.6 percent (Table 8). In 1990, HBCUs enrolled 17 percent of all African American college students.[15]

Hispanics

The Hispanic population in the United States reported unprecedented growth during the 1980s. Despite these gains, however, high school graduation rates for this group remain low, as documented previously in this report. Although Hispanics have not improved their high school graduation rates, students who do complete high school have helped increase Hispanic enrollment in higher education.

Overall, Hispanics recorded sustained growth throughout higher education during the past decade, with enrollment gains of 61 percent from 1980 to 1990. More recent data from 1988 to 1990 show no basic change in this trend, as Hispanic enrollment grew 11.5 percent during this two-year period (Table 4). Hispanic men and women posted nearly identical gains, with increases of 11 percent and 11.9 percent, respectively, since 1988 (Table 5).

Four-year institutions showed the most significant growth in Hispanic enrollment, with an increase of 16.2 percent from 1988 to 1990 (Table 4). By contrast, enrollments at two-year schools showed a jump of only 7.8 percent. Nonetheless, two-year colleges still continued to enroll about 55 percent of all Hispanics in college during 1990, a rate similar to those in previous years.

Although larger numbers of Hispanics are enrolled in public colleges, Hispanics showed larger enrollment gains in independent institutions during the period from 1988 to 1990. These independent schools showed an 18.3 percent gain in Hispanic enrollment since 1988, compared to 10.4 percent at public institutions (Table 5).

Hispanics made solid gains in other areas of higher education during the period, particularly in graduate school enrollment. Graduate figures show a 17.9 percent gain for Hispanics from 1988 to 1990, while undergraduate and professional school enrollments were slightly behind with gains of 11 percent each (Table 6).

American Indians

Like the other minority groups, American Indians and Alaskan Natives showed moderate growth in higher education enrollments from 1988 to 1990. Still, American Indians represent less than 1 percent of all students in higher education (Table 4). The 10.8 percent increase recorded since 1988 pushed American Indian enrollment to just above the 100,000 mark.

In a break with past trends, American Indians showed a surprisingly large increase in enrollment at four-year institutions (Table 4). These schools showed a 14.3 percent gain from 1988 to 1990 and a 30 percent increase for the past decade. By comparison, enrollment at two-year schools increased by 8 percent and 15 percent, respectively.[16]

Despite these signs of progress, the enrollment increases have occurred almost exclusively at the undergraduate level (Table 6). American Indians showed gains of 10.5 percent in this category, while data show no appreciable differences at either the graduate or professional level between 1988 and 1990.

American Indian women posted larger enrollment gains than men, but by only a small margin. Data also show an enrollment increase of 11.1 percent at public institutions and 9.1 percent at independent schools (Table 5).

Asian Americans

Asian Americans nearly doubled their enrollment in higher education during the past decade, as both men and women entered college in significantly larger numbers. This tremendous growth is tied directly to the steady Asian American population growth in the United States during the past 15 years. Yet figures for 1988 to 1990 show an enrollment increase of 11.7 percent, a sign that the sizable increases of the 1980s may give way to somewhat slower growth in the future.

Asian American students posted the largest growth at four-year institutions, with gains of 15.5 percent from 1988 to 1990 (Table 4). By contrast, they recorded an increase of only 6.5 percent at two-year schools.[17] With that in mind, it is not surprising that Asian American enrollment at independent colleges and universities outpaced gains made at public institutions. Independent schools showed growth of nearly 20 percent for Asian Americans during the period, compared to 9.6 percent at public institutions (Table 5).

Asian American men and women both posted moderate enrollment gains of 11 percent and 13 percent, respectively, from 1988 to 1990 (Table 5). While their numbers remain small, Asian Americans made a gain of 28.6 percent at professional schools during the period — the largest gain of any minority group (Table 6). This figure compared to increases of 13 percent in graduate education and 11 percent in undergraduate education.

Photo credit: Ohio State University

Degrees Conferred

In last year's *Status Report*, educators learned of some small but important gains made by minority groups in degrees awarded from 1987 to 1989. Based on data from the NCES, the report showed that African Americans made marginal gains in bachelor's and master's degrees, halting a downward slide from the 1970s. But these gains—most evident among women—were not nearly enough to offset major losses incurred during most of the 1980s.

The report also found progress among Hispanics, including a 10.4 percent gain at the baccalaureate level and a 3.2 percent jump at the master's level (Tables 10 and 11). As in the case of African Americans, most of these gains were the result of more women earning degrees. Asian Americans also reported sizeable gains of 17.2 percent in baccalaureate degrees and 25.2 percent in master's degrees.

This year's report will analyze these statistics by academic field, focusing on seven key subject areas: education, business, social sciences, health professions, public affairs, life sciences and engineering. This section will show that despite small gains in degree fields, progress is not uniform among all groups or academic disciplines. Once again, data for bachelor's and master's degrees come from NCES; the National Research Council provides the information on doctorate degrees.

General Trends

At the baccalaureate level, minorities posted gains in five major fields, including education and social sciences—both of which suffered a steady decline in the late 1970s and early 1980s. Data for social sciences show a 19 percent gain in baccalaureate degrees from 1987 to 1989, reversing the large declines from the previous decade (Table 13). In education, the increase was a modest 2.1 percent but showed a turnaround from the steep drops of previous years.

However, minorities only experienced a slight increase in engineering from 1987 to 1989. The 1.2 percent gain in engineering degrees for minorities slowed the upward trend in engineering degrees that occurred during the late 1970s and early-to mid-1980s. This decline was mainly caused by fewer minority men receiving engineering degrees. Amid the renewed interest in liberal arts, this decline may mean that minorities are moving to other subject areas.

At the master's level, minorities achieved progress in all major fields from 1987 to 1989, but at an uneven rate. Business showed the largest increase—16.3 percent—followed by engineering, with 10.4 percent (Table 14). Engineering gains were solely due to increases in the number of awards to Asian Americans. Education made a marginal 3.5 percent increase, reversing a downward trend from the mid-1970s. Except for business and social sciences, most of the gains at the master's level were the direct result of progress made by Asian Americans.

African Americans

From 1987 to 1989, African Americans made moderate gains in social science degrees at the undergraduate level and stopped the downward trends in other academic disciplines. African American men, however, continued to lose ground in health, education, and life sciences. They also lost ground in engineering degrees (Table 13).

In engineering, the number of bachelor's degrees awarded to African Americans declined 7.5 percent during the period (Table 13). African American men suffered a larger loss than African American women. The 2,351 bachelor's degrees awarded to African American men in 1989 reflected an 8.9 percent loss, compared with a loss of 3.8 percent for their female counterparts.

The number of baccalaureate degrees in social sciences began to show a resurgence in 1989 after a lengthy downturn. Social science degrees increased 9.4 percent, including growth of 7.4 percent for men and 11 percent for women. Overall, however, social science degrees for African Americans at the

bachelor's level dropped 40.8 percent from 1976 to 1989.

Bachelor's degrees in education remained largely unchanged for African Americans from 1987 to 1989, as women posted a 6.2 percent increase but the total for men fell 14.8 percent. Yet this finding may be considered good news, since it could signal an end to the mass exodus of African Americans from this field. From 1976 to 1989, the number of baccalaureate education degrees declined 70.2 percent.

African American men continued to lose ground in the life sciences, with a drop of 4.1 percent from 1987 to 1989. That loss brings the total decline for African American men in that field to 39 percent since 1976. Men also earned 4 percent fewer degrees in the health professions from 1987 to 1989, after making progress in that category during the late 1970s and 1980s.

Business continued to be the most popular baccalaureate degree choice for African American men and women from 1987 to 1989. Yet growth was recorded at just 2.7 percent—a significant slowdown from the early-to mid-1980s. From 1987 to 1989, African American men accounted for most of this stagnation. African American women more than doubled their business degrees from 1976 to 1989, yet they showed a gain of only 4.7 percent during the final two years of this period.

At the master's degree level, business degrees for African Americans increased by 9.5 percent from 1987 to 1989 (Table 14). Women accounted for much of this jump with gains of 13.5 percent, though the rate for men also rose 6.7 percent. African American women earned 6.5 percent more degrees in public affairs during the period, while African American men held relatively steady in the degree awards in this field.

African Americans showed signs of slowing downward trends in education and social science degrees at the master's level. Overall, their number of education degrees fell 57.6 percent from 1976 to 1989, yet they showed little change from 1987 to 1989. Likewise, social science degrees dropped 55 percent for the entire 13-year period but declined only 4.6 percent in the final two years.

African Americans made no progress in the health professions at the master's level from 1987 to 1989. The number of master's degrees awarded to men increased 28.8 percent during the period, making up for a surprising 5.9 percent drop in degrees for women. However, African Americans earned 37.3 more health degrees from 1976 to 1989.

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Hispanics

Hispanics experienced gains in four major academic fields at the baccalaureate level from 1987 to 1989, with social sciences posting the largest increases. Both men and women continued to make progress. From 1987 to 1989, Hispanic men registered a 19.9 percent increase

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and Hispanic women a 32.1 percent hike in social science degrees. These increases reversed a downward trend from earlier years.

Hispanics earned nearly three times as many baccalaureate business degrees in 1989 than in 1976, yet they made gains of only 9.2 percent from 1987 on. Women accounted for much of this progress. From 1976 to 1989, the rate for women increased 7.5 times, moving from less than 500 degrees earned to more than 3,500.

In the health professions, Hispanics achieved a 4.1 percent gain in bachelor's degrees from 1987 to 1989, including a 3.9 percent increase for men and a 4.1 percent increase among women. This gain reflected slower growth from the late 1970s and early 1980s.

In education, Hispanics registered a 3.1 percent gain at the bachelor's level from 1987 to 1989—including a 12 percent increase for Hispanic men. Despite this progress, however, Hispanics could not overcome a net loss of 19 percent in education degrees from 1976 to 1989.

Between 1987 and 1989, Hispanic men declined 5.3 percent in engineering degrees, while women experienced a 5.3 percent gain. However, because Hispanic men receive larger numbers of engineering degrees than Hispanic women, the losses experienced by men were not offset by the gains made by women.

At the master's level, Hispanics reported sustained growth in the number of business and health degrees awarded. From 1976 to 1989, the number of master's business degrees tripled, largely due to a tenfold increase among women (Table 14). More recent figures show an increase of 10 percent from 1987 to 1989, including a 24 percent jump for women.

In the health professions, the number of master's degrees awarded to all Hispanics more than doubled from 1976 to 1989 as women tripled their degree awards; however, the increase amounted to just 5.3 percent for 1987 to 1989.

Hispanics showed no progress in education degrees at the master's level; the number of degrees fell 10.9 percent from 1976 on, including a 3.4 percent drop from 1987 to 1989. However, recent trends show that the downward slide in degree awards for Hispanic men in this field of study may be stopping. Despite a 41 percent drop since 1976, the number of degrees for men remained constant from 1987 to 1989.

The figures on master's degrees in engineering contain both good and bad news for Hispanics. Women moved from the single digits in 1976 to 78 degrees by 1989. At the same time, men nearly doubled their degrees during the 13-year period but showed a decrease of 12.2 percent from 1987 to 1989.

American Indians

American Indians continued to represent only a small fraction of the students earning bachelor's and master's degrees from 1987 to 1989. Despite some percentage increases, their representation in many fields continued at a very low level.

In education, American Indians made a gain of 18.8 percent at the bachelor's level, which included a 37.1 percent gain for men and an 11.9 percent jump for women (Table 13). Still, only 537 received a bachelor's degree in education in 1989.

American Indian men lost ground in several key subject areas. Baccalaureate degrees for men declined 10.3 percent in business, 11.6 percent in social sciences, and 11.4 percent in life sciences. By contrast, women posted gains of 21.4 percent in business and 13.2 percent in life sciences. American Indian men also experienced a slight decline (3.2 percent) in engineering degrees, while American Indian women netted a 9.5 percent gain. But, the number of American Indian women earning this degree moved from a minuscule 2 in 1976 to a high of only 46 in 1989.

Few American Indians earned master's degrees in 1989. Education continued to be the most popular field of choice with 386 degrees awarded—a 2.9 percent increase from 1987 (Table 14). From 1976 to 1989, however, master's degrees in this field showed little overall change. The number of degrees awarded to American Indian women increased 19.9 percent during the period, but this again could not make up for a 28.4 percent drop among American Indian men.

American Indians nearly tripled the number of master's degrees earned in business from 1976 to 1989. The rate of increase was 15.9 percent from 1987 to 1989, when 197 students earned the degree. Among men, the number of degrees increased 95.3 percent from 1976 to 1989, while the number for women jumped tenfold during that period.

American Indians also made gains in social sciences and health professions at the master's level from 1987 to 1989, though the total number of degrees in each field remained under 100. Data show large drops in the number of master's degrees in public affairs and engineering during the period.

Asian Americans

Asian Americans continued to post gains in nearly all baccalaureate degree fields from 1987 to 1989. Data show the largest increases in business and social sciences, with gains of 33.9 percent and 35.7 percent, respectively, as both men and women showed continued progress in social science degrees and quadrupled the number of business degrees earned annually since 1976.

Asian American women posted small to moderate increases of between 7 and 16 percent in health professions, life sciences,

Photo credit: University of Maryland College Park

engineering, and education at the bachelor's level. Men achieved similar increases in all fields but education, where they suffered a 12.5 percent decrease. Still, the number of bachelor degrees in education increased 3.2 percent during the period, helped by a 9.5 percent increase among women.

Asian American students also made solid gains in engineering. From 1976 to 1989, baccalaureate engineering degrees increased sevenfold among Asian Americans; however, the growth rate slowed to 7.9 from 1987 to 1989. From 1976 to 1987, the number of women earning bachelor's degrees in engineering shot up from 47 to 1,150. By 1989, however, the number had climbed to only 1,242, for a growth rate of 8.0 percent since 1987.

At the master's level, Asian Americans made gains in all six academic fields. Yet the data also appeared to show an end to the unprecedented gains made in business and engineering from 1976 to 1987. In business, the number of master's degrees quadrupled from 1976 to 1989. From 1987 to 1989, this trend continued with an increase of 28.6 percent, including a 23.2 percent gain for Asian American men and a 39.2 percent increase for Asian American women. The figures for engineering show a similar breakdown. The fourfold gain in master's degrees from 1976 to 1989 includes an increase of only 22.1 percent since 1987.

Like other minority groups, Asian Americans at the master's level also showed more interest in education and social sciences from 1987 to 1989. In education, the number of degrees increased 47 percent, with a 59.8 jump for women and a 19.8 percent increase for men. This marks a reversal in the trend from 1976 to 1987, when Asian Americans lost ground in this category.

At the same time, master's degrees in social sciences and public affairs continued to increase in popularity. From 1987 to 1989, the number of social science degrees increased 31.6 percent—26.3 percent among men and 39.8 percent among women. This increase accounted for much of the growth in this category from 1976 to 1989.

The number of students earning master's degrees in public affairs more than doubled from 1976 to 1989. An increase of 31.8 percent from 1987 to 1989 helped fuel this progress. Women posted the largest gain—44.1 percent—from 1987 to 1989 and tripled the number of degrees earned during the 13-year period.

Doctorate Degrees

Doctorate data from the National Research Council for U.S. citizens reveal that Hispanics showed modest growth in the number of doctorates awarded from 1989 to 1990, while African Americans registered only minimal increases, and American Indians and Asian Americans experienced little change. Overall, the number of doctorates awarded to U.S. citizens rose 4.4 percent during the year to 24,190 (Table 15).

Of U.S. doctorate recipients, African Americans made gains in engineering, social sciences and education but lost ground in physical science, life sciences and the humanities (Table 16). Yet their number remains low in many categories. From 1989 to 1990, Hispanic U.S. doctorate recipients showed gains in all six categories. Hispanics showed the most growth in social sciences and the humanities. Asians Americans (U.S. citizens) earned most of their doctorates in engineering and life sciences; however, they experienced an 11.6 percent drop in engineering doctorates between 1989 and 1990.

The data show that the number of American Indians earning doctorates continued at a very low level. In 1990, only 94 doctorates were awarded to American Indians—up just 1 from the previous year. American Indians lost ground in physical sciences, engineering, and life sciences but reported gains in social sciences, humanities, and education.

Degrees Conferred by Historically Black Colleges and Universities

The nation's HBCUs experienced a moderate decline in the number of degrees awarded in five major subject fields from 1987 to 1989 (Table 17). Engineering took the sharpest drop at the bachelor's level, while business and management suffered the largest decrease at the master's level.

Though still a popular choice for students at HBCUs, degrees in business and management fell 7.1 percent at the bachelor's level and 30 percent at the master's level from 1987 to 1989. In engineering, the number of degrees decreased by 25.2 percent at the bachelor's level and 4.5 percent at the master's level. The number of master's degrees in engineering also remained low, with only 105 awarded in 1989.

In education, the number of bachelor's degrees fell 12.2 percent during the period, continuing a downward trend from the early 1980s. Education remained the most popular option among the graduate fields surveyed, but it also suffered a drop of 4.9 percent from 1987 to 1989.

Among the six major categories, only public affairs posted a small increase in degrees awarded during the late 1980s. The number of bachelor's degrees in this field increased by 4 percent, and the number of master's degrees rose 15.3 percent.

HBCUs also reported a drop in the number of doctorates awarded from 1987 to 1989. The number of students earning doctorates in education fell from 91 to 72, a 21 percent decrease. Other fields—even those with few students already—experienced decreases during the two-year period. For example, the number of doctorate degrees in social sciences fell from 26 to 24, an 8 percent drop. Only four students earned doctorates in public affairs at HBCUs, down from nine in 1987.

Implications

From the data in these sections, it is clear that minorities have made significant gains in some sectors of higher education. Current demographic trends and improved high school completion rates for African Americans are sources of optimism for those concerned about the pipeline of minorities moving into higher education. Increased college enrollment and earned degrees figures for minorities also show some encouraging signs for the future.

Despite this progress, however, minority students today face many obstacles to achievement. If this nation is to truly address the educational needs of its burgeoning minority population, sustained efforts must be made to improve the overall college participation and completion rates for minorities. A deteriorating economy has slashed state budgets, forcing at least 32 states to cut back on spending in higher education.[18] Reduced institutional and state student financial support, new and higher admission standards, and rigid enrollment caps threaten to undo much of the progress of the late 1980s at the very time minorities need to consolidate their gains.

The nation's colleges and universities cannot afford to rest or cut back support to initiatives designed to increase access and achievement of minority students. Higher education budget balancing efforts at the federal, state, local and institutional levels must not be done at the expense of minority students and other underserved groups. Institutions must make strong efforts to recruit, retain and graduate minority students and to provide them with support services they may need to succeed. We must not revert to the late 1970s and early 1980s, when gains by minorities during the early to mid–1970s bred overconfidence among some policymakers. Only now are we beginning to recoup some of the losses of that era. Mindful of these past lessons, colleges and universities must continue their aggressive efforts to increase minority access and achievement so that higher education can report sustained progress into the 21st century.

Special Focus: Racial and Ethnic Trends in Academic Employment

This year's report highlights employment trends in higher education and places a particular emphasis on the employment of Asian American, American Indian, Hispanic, and African American faculty on college and university campuses. Much of the data for this section are taken from employment and faculty surveys conducted by the U.S. Equal Employment Opportunity Commission (EEOC), the Higher Education Research Institute (HERI) at the University of California, Los Angeles, and the U.S. Department of Education's NCES. Most of the trend data come from the EEOC's "EEO-6 Higher Education Staff Information" surveys, which are based on a different number of reporting-institutions each survey year; therefore, the reader should be extremely cautious about interpreting changes in the actual employment counts over time.[19]

The employment of people of color in recognizable numbers on predominantly white college and university campuses has occurred only during the last 25 to 30 years. In 1960, African Americans made up 3 percent of all higher education faculty in the United States, and nearly all of them were employed in HBCUs.[20] In 1961, less than 1 percent of all faculty at predominantly white institutions were African American; approximately three hundred African American faculty held appointments at these institutions; by 1972-73, African Americans represented about 1 percent of faculty on such campuses.[21] Similarly, prior to the 1960s, the few Hispanics who held faculty appointments were concentrated in Puerto Rican universities and in community colleges.[22] A 1972-73 national faculty survey revealed that of the 1,500 faculty who identified themselves as Mexican American or Chicano, 40 percent were employed

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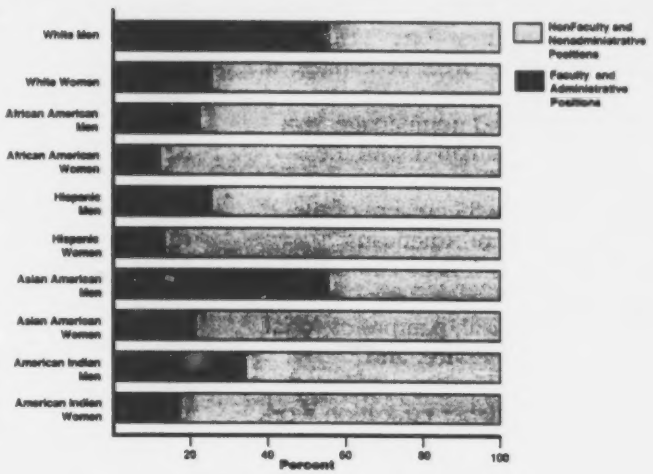
in community colleges.[23] At that time Hispanics represented 0.6 percent of all U.S. faculty.

In the late 1960s and early 1970s, predominantly white colleges and universities started to feel pressure from the federal government through antidiscrimination legislation, executive orders, and affirmative action regulations. Only then did some of these institutions make an affirmative effort to employ people of color in faculty positions. However, since the early 1980s, the federal government has weakened significantly and regressed in its commitment to affirmative action and civil rights issues for people of color. The employment pattern of African Americans, Hispanics, and American Indians has hardly changed during the last 10 to 15 years. Although the number of minority faculty has increased during this period, as has total higher education employment, the respective shares of faculty positions that these groups hold remain relatively unchanged.

General Higher Education Employment Trends

As college and university enrollments and the number of colleges and universities expanded during the 1970s and 1980s, employment in higher education also grew. According to EEOC figures, between 1979 and 1989, the number of full-time employees in higher education increased by 20.8 percent, from 1.5 million to 1.8 million (Table 18). During the same period enrollment grew by 13.4 percent (Table 4). The number of full-time faculty rose by 14 percent, (Table 19). The number of part-time faculty increased 14.8 percent between 1979 and 1989 (Table 23). Minorities increased their collective share of full-time positions, from 17.7 percent in 1979 to 20.3 percent by 1989. However, Asian Americans, American Indians, African Americans, and Hispanics did not achieve equivalent gains. Each racial and ethnic group fared very differently based on employment status (full-time vs. part-time), academic rank, tenure status, and type of position held. For example, American Indians and African Americans managed only to maintain their respective shares of full-time faculty positions, while Hispanics made slight gains and Asian Americans made sizeable gains. However, the tenure rate of Asian American faculty continues to be lower than average.

Figure 3
Distribution of Employees in Faculty and Administration versus Nonfaculty and Nonadministration, 1989



Source: U.S. Equal Employment Opportunity Commission, "EEO-6 Higher Education Staff Information" survey, 1989.

During the 1980s, gender differences in academic employment trends also were evident. Between 1979 and 1989, women experienced a 29.4 percent increase in full-time employment, compared with a 12.9 percent increase for men. As of 1989, more than half (51.4 percent) of the higher education labor force was female, compared with 46 percent in 1975 and 48 percent in 1979. However, regarding full-time faculty positions, little progress was made: only 30.3 percent of current full-time faculty positions are held by women. Women continue to hold a higher percentage of untenured and lower-ranked faculty positions. Although the gap in tenure rates between men and women narrowed, by the end of the 1980s only 59.2 percent of women faculty were tenured, compared with 74.9 percent of men faculty.

Employment trends for African American, American Indian, Asian American, and Hispanic men and women also reveal different patterns of progress. These trends will be discussed in the following sections for each racial and ethnic group, first looking at total employment in higher education and then at faculty positions.

African American Higher Education Employment Trends

Considering the total employment picture during the 1980s, African Americans experienced no change. In 1979, African Americans held 12.3 percent of all higher education positions, compared with 12.4 percent in 1989 (Table 18). The number of African Americans employed in higher education grew at approximately the same rate as the total higher education labor force—21.5 percent compared with 20.8 percent. Although African Americans continue to be underrepresented in

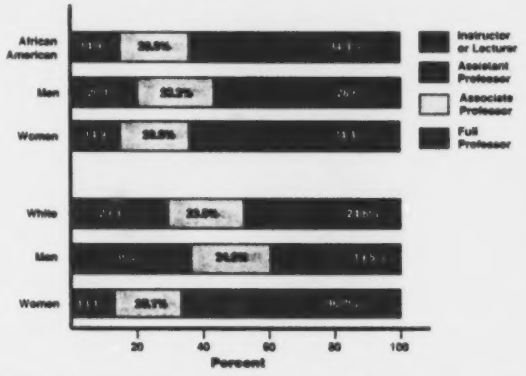
faculty and administrative positions, they constitute 12.4 percent of the total higher education labor force, compared to 10.8 percent of the overall U.S. labor force.[24] However, a significantly larger percentage of African Americans are employed in nonfaculty and nonmanagement positions, compared with the overall higher education work force. Nearly 85 percent of the 220,277 African Americans employed on college campuses work in professional support services, clerical, paraprofessional, skilled craft, service, and maintenance positions.[25] The share of the total higher education work force in such positions is 63.3 percent.[26]

Higher education employs more African American women than men. Approximately 62 percent of all African Americans employed full-time in higher education are women. In 1989, African American men represented 4.7 percent of the full-time higher education work force, while their female counterparts held 7.7 percent of all positions. However, African American women hold disproportionately high shares of nonfaculty and nonadministrative positions especially clerical and support positions (Figure 3). This type of employment pattern did not change during the 1980s. Nearly 88 percent of African American women employed on college campuses work in clerical, support services, and nonmanagement positions, compared with 77.8 percent of African American men, 77.1 percent of white women, and 44.3 percent of white men.[27] Thus, although African American women clearly outnumber African American men in higher education employment, large percentages of both groups hold lower-paid, lower status clerical, maintenance, and service-related jobs.

Full-Time Faculty

During the 1980s, the employment of African Americans kept pace with general faculty hiring. Since the number of African American faculty increased in direct proportion to the overall growth in faculty employment, African Americans made no progress in increasing their share of full-time faculty positions. As a result, African Americans remain tremendously underrepresented among full-time faculty. In 1979, African Americans held 19,494 or 4.3 percent of all full-time faculty positions; by 1989 they held 23,225 or 4.5 percent of those positions (Table 19). This compares with 88.5 percent for white faculty, 4.7 percent for Asian American faculty, 2.0 percent for Hispanic faculty, and 0.3 percent for American Indian faculty. Between 1979 and 1989, Asian Americans surpassed African Americans in the number of full-time faculty positions they held.

Figure 4
Distribution of Full-Time African American and White Faculty by Rank and Sex, 1989



Source: U.S. Equal Employment Opportunity Commission, "EEO-6 Higher Education Staff Information" survey, 1989

Note: These figures were calculated using data in Table 21 of this report.

Nearly half of all African American faculty are employed at HBCUs. According to data from the 1989-90 HERI faculty survey, 47.7 percent of African American faculty work in HBCUs.[28] Consequently, African Americans represent only 2.3 percent of the faculty at predominantly white colleges and universities, compared with approximately the same percentage in 1979.[29]

The largest share of African American faculty is employed at four-year public colleges. According to the HERI faculty survey, over 46 percent of African American faculty hold appointments at four-year public colleges, compared with 22 percent at two-year public colleges and 17.6 percent at four-year independent colleges.[30] Only 8.5 percent of all African American faculty are employed at four-year public universities, with even fewer—4.6 percent—at independent universities.

African American men continue to hold a slightly larger share of full-time faculty positions than African American women. During the 1980s, the proportion of African American men and women employed in full-time faculty positions did not change significantly. In 1989, of 23,335 African Americans employed in full-time faculty positions, 12,483 were men, or 53.7 percent, and 10,742 were women, or 46.7 percent (Table 19). African Americans are the only racial or ethnic group in which women hold close to the same number of faculty positions as men. In comparison, over 70 percent of the 455,600 white full-time faculty are men. Men also are tenured at higher rates than women, and men of all racial and ethnic groups are much more likely than women to be full or associate professors. However, tenure rates for both African American women and men continue to be among the lowest.

Tenure and Rank

Between 1979 and 1989, African Americans made little progress in increasing their overall faculty tenure rate. According to the 1989 EEOC figures, only 61 percent of African American faculty on tenure track are tenured (Table 20), compared with 71.9 percent of white faculty. Ten years earlier, 58.4 percent of African American faculty were tenured, compared with 68.9

percent of white faculty. Data from the HERI faculty survey show somewhat lower tenure rates for all faculty in 1989. However, the survey also reveals lower tenure rates for African American faculty compared with white faculty—53.8 percent versus 67.8 percent.[31]

As stated earlier, African American men are more likely to be tenured than African American women. Although African American women made some progress in approximating the tenure rate of their male counterparts during the 1980s, tenure rates for African American women and men in 1989 stood at 58.6 percent and 62.9 percent, respectively. In 1979, the gender gap in tenure rates was slightly larger—54.1 percent for African American female faculty compared with 61.8 percent for African American male faculty.

Analysis of faculty positions by rank presents a bleak commentary on the progress of African Americans into senior faculty positions. African American faculty continue to be concentrated at the lower end of the faculty professional ladder in assistant professor, instructor, or lecturer positions. Of all African American faculty with rank, only 14.9 percent are full professors, and another 20.8 percent are associate professors.[32] Comparable figures for white faculty are 29.3 percent and 23 percent, respectively (Figure 4).

Hiring and promotion practices in the 1980s had little effect on increasing the representation of African Americans in senior faculty positions. In 1989, only 2.4 percent of full professor positions and 4.1 percent of associate professor positions were held by African Americans (Table 21). Comparable figures for 1979 were 2.1 percent and 3.2 percent, respectively.

Although white women and Asian American men increased their respective shares of full and associate professorships between 1979 and 1989, white men continue to hold the vast majority of senior faculty positions. In 1989, 79.6 percent of the full professorships and 66.3 percent of the associate professorships were held by white men.[33]

Photo credit: Ann Youngling, Emory University

Faculty by Discipline

According to data from the HERI faculty survey, the largest shares of all African American faculty, are employed in education departments (15.2 percent) and in the social sciences (15 percent). Business and health-related departments rank third (9.8 percent) and fourth (8.8 percent) in employing African American faculty (Table 22). Engineering departments employ the smallest percentage of African American faculty: only 1.4 percent.

The three top areas of employment for African American women are education (19.5 percent), health-related fields (16.8 percent), and the social sciences (13.9 percent). A large share of African American men (16 percent) is employed in the social sciences, followed by business with 11.9 percent and education with 11.1 percent. Only 1.1 percent of African American men work in health-related fields. African American women, are least likely to be employed in the engineering department; less than 0.1 percent of African American women faculty are employed in engineering.

Administration and Management

African Americans hold a larger share of administration and management positions than faculty positions. In 1989, 8.6 percent or 11,796 of all college and university administrators were African Americans, compared with only 4.5 percent or 23,225 of the full-time professorate (Table 24). During the 1980s, African American women experienced an increase in their share of administrative and management positions, while African American men did not. African American women's share of administrative positions increased from 2.9 percent in 1979 to 4.2 percent in 1989. The number of African American men employed in

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academic administration also increased during this period, with their rate of increase keeping pace with overall increases in higher education administration and management positions. Consequently, African American men's share of administrative and management positions remained about the same: 4.5 percent in 1979 compared with 4.4 percent 10 years later (Table 24).

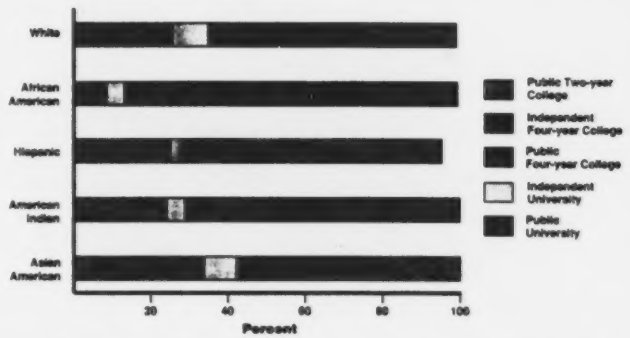
Approximately the same percentage of African Americans are college presidents. A 1986 ACE study of college and university presidents, found that 4.6 percent were African Americans.[34] However, this same study estimated that only 2 percent of predominantly white institutions were headed by African Americans. Figures for 1991 indicate that 175 or 5 percent of all higher education institutions are headed by African Americans.[35]

Hispanic Higher Education Employment Trends

During the 1980s, the employment growth rate of Hispanics in higher education outpaced the growth rate of the total higher education labor force. In 1989, 69,238 Hispanics were employed on the nation's college and university campuses, compared with 41,125 10 years earlier. However, despite these gains, Hispanics remain underrepresented in nearly all areas of higher education employment. In 1989, less than 4 percent of the college work force was Hispanic, compared to 7.8 percent of the U.S. labor force.[36] In analyzing higher education employment trends for Hispanics it is important to keep in mind that the Hispanic population in the United States grew by 39 percent between 1980 and 1989.[37] In contrast, the non-Hispanic population grew at a rate of only 7.5 percent. The employment growth that Hispanics are experiencing in higher education is not out of line with their substantial growth in the U.S. population.

Like African Americans, Hispanics are overrepresented in nonfaculty and nonmanagement positions. In 1989 over 8 out of 10 Hispanics employed in higher education worked in nonfaculty and nonmanagement positions.[38] A slightly higher percentage of Hispanic women than men is employed in nonfaculty and nonmanagement positions. Nearly 87 percent of Hispanic women working in higher education are employed in these types of positions, compared with 74.5 percent of Hispanic men, 77.1 percent of white women, and 44.3 percent of white men.[39]

Figure 5
Full-Time Faculty by Type, Control, and Race/Ethnicity, 1989-90



Source: Higher Education Research Institute, University of California, Los Angeles, "1989-90 Higher Education Research Institute Faculty Survey," unpublished tabulations, November 1991

Between 1979 and 1989, the number of Hispanic women working in higher education increased at a faster rate than that of their male counterparts—84.2 percent compared with 54.5 percent (Table 18). By 1989, 51.2 percent of all Hispanic college and university employees were women, up from 46.6 percent in 1979. However, Hispanic men outnumber Hispanic women two to one in full-time faculty appointments.

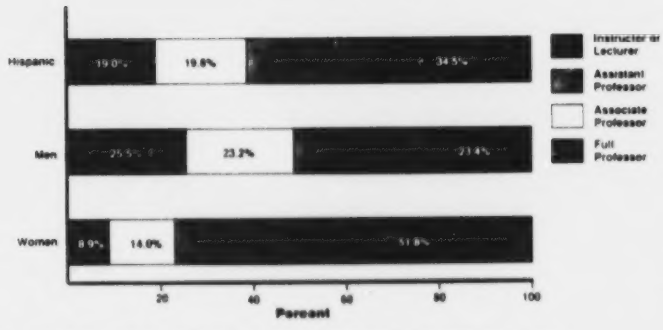
Full-Time Faculty

During the 1980s, the number of full-time Hispanic faculty increased at a faster rate than the total number of full-time faculty—49 percent compared with 14 percent (Table 19). However, progress in increasing Hispanics' overall representation in higher education faculty posts has been marginal, and the Hispanic share of full-time faculty positions still remains small. In 1989 only 2 percent or 10,087 of all full-time faculty positions were held by Hispanics. Ten years earlier, Hispanics held 1.5 percent of full-time faculty positions. By comparison, Hispanics increased their share of college enrollment from 3.9 percent to 5.5 percent between 1980 and 1990. Hispanic college enrollment reflected a 62.4 percent gain in two-year colleges and a 58.5 percent increase in four-year institutions during this period (Table 4).

As stated earlier in this report, a larger percentage of Hispanic faculty are employed in two-year institutions than in other types of colleges and universities (Figure 5). In 1989, 35.2 percent of Hispanic faculty were employed in two-year public colleges, followed by 25 percent in public universities and 20.3 percent in four-year independent colleges.[40] Four-year public colleges employ another 17.1 percent of Hispanic faculty, while independent universities only hold 2.4 percent of all Hispanic faculty appointments.[41]

Hispanic women experienced more growth in full-time faculty positions than their male counterparts; however, Hispanic men still outnumber Hispanic women two to one in full-time faculty positions (Table 19). In 1989, men filled 6,757 or 67 percent

Figure 6
Distribution of Full-Time Hispanic Faculty by Rank and Sex, 1989



Source: U.S. Equal Employment Opportunity Commission, "EEO-6 Higher Education Staff Information" survey, 1989.

Note: These figures were calculated using data in Table 21 of this report.

of the 10,087 full-time faculty positions held by Hispanics, compared with 71.9 percent in 1979.

Rank and Tenure

EEOC data indicate that 70.7 percent of all full-time faculty on tenure track are tenured (Table 20). The tenure rate for Hispanic faculty is lower than that of white faculty, but slightly higher than that of African American and Asian American faculty. During the 1980s, the tenure rate of Hispanic faculty improved slightly but remained below the national average, ranging from 62.1 percent in 1979 to 67.2 percent in 1985, and decreasing to 63.9 percent in 1989.

As in other racial and ethnic groups, Hispanic female faculty are tenured less frequently than their male counterparts. In 1989, only 58.4 percent of Hispanic women in faculty positions were tenured, while the tenure rate for Hispanic men that year was 66.3 percent. Little occurred during the 1980s to narrow the 7-to-9 percent difference in the tenure rate of Hispanic men and women. Hispanic women also are conspicuously absent from senior faculty ranks, while Hispanic men faculty fare only slightly better.

The number of Hispanic full and associate professors continues to be disturbingly low. According to EEOC data, Hispanics hold only 1.3 percent of all full professor positions and 1.7 percent of associate professor positions (Table 21). In 1989, of the 122,965 full professors in higher education, only 349 (0.2 percent) were Hispanic women, and 1,538 (1.1 percent) were Hispanic men. The same kind of pattern is repeated at the associate professor level. Consequently, like African American faculty, a smaller share of Hispanic faculty is employed as full and associate professors than white faculty. In 1989, 19 percent of all Hispanic faculty with rank were full professors, while another 19.6 percent were associate professors.[42] It is important to note that 1989 EEOC figures reflect a doubling in the actual number of Hispanic full professors since 1979.

Hispanic faculty hold 1.7 percent of all assistant professor positions; 1.2 percent are held by Hispanic men and 0.5 percent by Hispanic women. Data from the 1989 EEOC survey reveal that 1,687 assistant professors are Hispanic men, and another 988 are Hispanic women (Table 21). Between 1979 and 1989, Hispanic women made larger gains at this level than their male counterparts.

Of all racial and ethnic groups, Hispanic female faculty are the most concentrated in instructor and lecturer positions (Figure 6). According to EEOC data, 51.8 percent of all Hispanic women

Photo credit: University of Maryland College Park

holding full-time faculty positions with rank are instructors or lecturers.[43] This compares with 23.4 percent of Hispanic male faculty, 36.7 percent of white female faculty, and 34.4 percent of African American female faculty.[44]

Faculty by Discipline

Like the general academic employment patterns, the academic department or area of employment for Hispanic faculty resembles their doctoral degree award pattern. As shown in Table 22, larger shares of Hispanic faculty are employed in the social sciences (17.6 percent) and in the humanities (13.5 percent). An additional 10.9 percent of Hispanic faculty are in education, followed by English departments with 10.8 percent, and health-related departments with 10 percent of all Hispanic faculty. Agriculture/forestry and engineering departments employ the smaller shares of the Hispanic professoriate (Table 22).

The 1989-90 HERI faculty survey reveals a number of differences by field for Hispanic male and female faculty. Health-related departments rank highest in employing Hispanic women faculty. Over 22 percent of all Hispanic female faculty are either teaching or conducting research in this area. In sharp comparison, only 2.1 percent of their male counterparts are in health-related departments. The second and third largest academic fields for Hispanic women are English and the social sciences. Over 21 percent of Hispanic male faculty hold appointments in social science departments, and 15.9 percent are in the humanities. Education ranks as the third-largest field for Hispanic men, followed by English.

Administration and Management

Colleges and universities made some gains in the number and percentage of Hispanic administrators during the 1980s. While the number of Hispanic administrators and managers nearly doubled, their overall representation in academic administration edged upward from 1.4 percent in 1979 to 2.3 percent in 1989 (Table 24). Although the increases Hispanics experienced in higher education administration during the 1980s were sizeable, the dearth of Hispanic administrators remains prevalent. In 1989, only 3,183 of the 137,561 college and university administrators, were Hispanic; more Hispanic administrators were men (1,860) than women (1,323). Although Hispanic men continue to outnumber their female counterparts in academic administration, given the faster growth rate of Hispanic women in this employment area the reverse may soon be true.

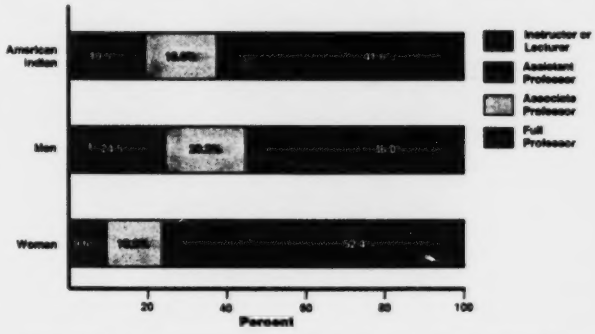
A smaller share of Hispanics serve as college presidents than work in higher education administration. Only 1.8 percent of colleges and universities were headed by a Hispanic president in 1986;[45] as of 1991, Hispanics headed 102 or 3 percent of higher education institutions.[46]

American Indian Higher Education Employment Trends

Less than one in every 200 full-time higher education employees is American Indian—0.4 percent, to be exact. Between 1979 and 1989, the total number of American Indians employed in higher education increased from 5,153 to 7,849 (Table 18). These numerical gains did little to change the overall representation of American Indians in the higher education labor force. In 1979, 0.3 percent of all full-time higher education employees were American Indian, compared with 0.4 percent 10 years later. Like Hispanics and African Americans, American Indian college employees are more frequently employed in nonfaculty and nonmanagement positions than other groups. Nearly 75 percent of all American Indian higher education employees are working in these types of positions.[47]

For American Indians, slightly more women are employed in higher education than men. Approximately 53 percent of all American Indians working on college and university campuses are women (Table 18). As in other racial and ethnic groups, American Indian women are more concentrated in nonfaculty and nonadministrative positions than their male counterparts: 83 percent of women compared with 65.7 percent of men work in these types of positions.[48]

Figure 7
Distribution of Full-Time American Indian Faculty by Rank and Sex, 1989



Source: U.S. Equal Employment Opportunity Commission, "EEO-6 Higher Education Staff Information" survey, 1989

Note: These figures were calculated using data in Table 21 of this report.

Full-Time Faculty

The number of full-time American Indian faculty remains minute. American Indian full-time faculty numbered 1,056 in 1979, compared with 1,498 in 1989 (Table 19). In 1989, American Indians only held 0.3 percent of all full-time faculty positions. To frame their underrepresentation in more graphic terms, only one in every 344 full-time faculty members is

American Indian. Although the actual number of American Indian faculty increased 41.9 percent between 1979 and 1989, this gain did little to increase their overall representation among faculty.

Nearly equal shares of American Indian faculty are employed at two-year and four-year public colleges—29.6 percent and 29.2 percent.[49] Public universities engage another 24.1 percent of American Indian faculty, while four-year independent colleges account for another 12.3 percent, and independent universities employ just under 5 percent of these scholars.

American Indian men outnumber American Indian women by almost two to one in faculty positions, with 65.9 percent of all full-time faculty positions held by American Indians (Table 19). The relative proportions of American Indian men and women holding faculty positions approximate the national average of all men versus all women.

Tenure and Rank

The American Indian faculty on tenure track hold tenure at a rate slightly lower than average. According to data from EEOC, 66.6 percent of the 618 full-time American Indian faculty on tenure track in 1989 were tenured (Table 20). This compares with an average faculty tenure rate of 70.7 percent. As with other racial and ethnic groups, the tenure rate of American Indian men was higher than that of their female counterparts—70.5 percent compared with 56.5 percent. In 1989, there were only 147 tenured American Indian female faculty, compared with 471 American Indian men.

During the 1980s, American Indians' participation rates within different faculty ranks did not improve. Like African Americans and Hispanics, they continue to be concentrated in the lower faculty ranks (Figure 7). This is particularly true for American Indian women faculty: in 1989, only 48 American Indian women were full professors, while another 69 held associate professor positions (Table 21). This compares with 261 who were either lecturers or instructors. Although American Indian men were represented more evenly within different faculty ranks, considerably more American Indian men held lecturer or instructor positions than full professorships in 1989—348 compared with 237.

Faculty by Discipline

Unfortunately, little information is available on the employment fields of American Indian faculty. The 1990 "Survey of Earned Doctorates" conducted by the National Research Council indicates that American Indians received 39.4 percent of their doctorates in education, 24.5 percent in the social sciences, 10 percent in other professional fields, and 8.5 percent in both the humanities and life sciences.[50] However, estimates of actual employment patterns derived from the NCES "1988 National Survey of Postsecondary Faculty" offer a somewhat different employment pattern. Using the percentage of American Indians employed in different academic program areas at four-year institutions and the total number of faculty in each of these program areas, it is estimated that larger shares of American Indian faculty at four-year institutions work in health sciences, natural sciences, the humanities, and social science departments than in other departments.[51] Since these estimates are based on employment patterns in four-year institutions, and since sizeable numbers of American Indian faculty are employed at two-year colleges, these estimates may differ considerably from actual employment patterns for the total pool of American Indian faculty.

Administration and Management

American Indians' share of administration and management positions remained relatively unchanged during the 1980s. In 1979, American Indian administrators held 0.3 percent or 330 of all administration and management positions. Ten years later, 0.4 percent or 491 of all full-time administrators were American Indians.

The number of American Indian women administrators increased from 89 in 1979 to 202 in 1989. Despite this doubling, the number of American Indian women college administrators and managers is still extremely small (Table 24). To make matters worse, American Indian men did not make the same kind of gain during this period; the number of American Indian men in administration and management increased only by 48 positions, from 241 in 1979 to 289 in 1989. However, they continue to outnumber their female counterparts in this employment area. In general, 1980 college employment trends for American Indians show gains in the total number of positions held, but these gains did not offset their underrepresentation at any level of employment.

The ACE profile on college presidents shows that in 1986, only 27 or less than 0.1 percent of college presidents were American Indian.[52] In 1991, 31 American Indians held college presidencies and nearly all of those headed tribally controlled colleges.[53]

Asian American Higher Education Employment Trends

In the 1980s, Asian Americans made sizeable gains in most higher education employment areas. Between 1979 and 1989, the number of Asian Americans employed in higher education nearly doubled, increasing their total share of all full-time positions from 2.3 percent to 3.6 percent (Table 18). The employment growth for Asian Americans was the

largest for any racial and ethnic group in higher education, and outpaced growth in the total higher education labor force. Like Hispanics, Asian Americans are experiencing rapid growth in the U.S. population, which may be fueling their increases in higher education employment.

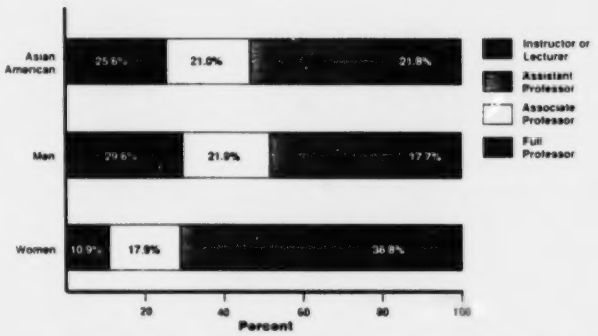
In 1989, of the 64,060 Asian Americans employed on colleges and university campuses, 56.8 percent were men and 43.2 percent were women (Table 18). Of all racial and ethnic groups, it is only among Asian Americans that men outnumber women in higher education employment. As in other racial and ethnic groups, higher percentages of Asian American women are employed in nonfaculty and nonadministration positions than are their male counterparts. Nearly 79 percent of all Asian American women employed in higher education work in nonfaculty and nonadministration positions.[54] This compares with a much smaller percentage (44.5 percent) of Asian American men.

Full-Time Faculty

In 1989, Asian Americans were the largest minority faculty group, holding 4.7 percent of all full-time faculty positions (Table 19). This figure represents an increase in their share of faculty positions from 2.9 percent in 1979. During the 1980s, Asian Americans surpassed African Americans in the number of full-time faculty appointments they held—24,125 positions compared with 23,225 positions.

Surprisingly, 1989 EEOC data also reveal that a very large percentage of Asian faculty—40.4 percent or 9,761—are non-U.S. citizens. This means only 2.8 percent of all higher education faculty are U.S.-born or naturalized Asian Americans. However, for the sake of this report, the term Asian American will be used regardless of U.S. citizenship, and therefore includes both citizens and noncitizens, unless otherwise specified.

Figure 8
Distribution of Full-Time Asian American Faculty by Rank and Sex, 1989



Source: U.S. Equal Employment Opportunity Commission, "EEO-6 Higher Education Staff Information" survey, 1989.
Note: These figures were calculated using data in Table 21 of this report.

The two largest employers of Asian American faculty are public universities and four-year public colleges. Nearly 34 percent of all Asian American faculty hold appointments at public universities, compared with 31.4 percent at four-year public colleges.[55] Considerably fewer Asian American faculty are employed at two-year colleges, four-year independent institutions and independent universities—15.2 percent, 11.2 percent, and 8.4 percent, respectively.[56]

During the 1980s, the number of Asian American women faculty increased at a faster rate than that of Asian American men. However, Asian American men still outnumber their female counterparts in full-time faculty positions by almost four to one. In 1989, only 21.2 percent of all Asian American faculty were women. Asian American women held 1 percent of all full-time faculty appointments compared with 3.7 percent for Asian American men (Table 19).

Tenure and Rank

Two faculty surveys reveal low tenure rates for Asian American faculty. According to EEOC data, Asian American faculty continue to hold tenure at rates lower than average. In 1989, 59.8 percent of all full-time Asian American faculty were tenured, giving the group one of the lowest tenure rates across different racial and ethnic groups (Table 20). Data from the 1989-90 HERI faculty survey show a somewhat higher tenure rate for

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Asian Americans–64.9 percent–which is almost equal to the tenure rate of white faculty (67.8 percent).[57]

Both EEOC and HERI data show that Asian American men hold tenure at a higher rate than Asian American women—61.2 percent compared with 53.5 percent (Table 20). This disparity in tenure rates between Asian American men and women narrowed during the 1980s. The tenure rate among Asian American women has slightly increased, while Asian American men's tenure rate appears to be slightly lower. Tenure rates for Asian American men and women were 64.5 percent and 49.1 percent, respectively, in 1979.

Because of the number of Asian American men who are full and associate professors, Asian Americans rank a distant second in the number of upper-ranked faculty positions they hold; however, their numbers are still extremely small in comparison to white men, who continue to fill the majority of senior faculty positions. In 1989, 3.9 percent of all full professors and 3.5 percent of all associate professors were Asian American men, compared with white men, who represent 79.6 percent of full professors and 66.7 percent of associate professors (Table 21). In contrast, only 0.2 percent of full professor positions and 0.5 percent of associate professor positions are filled by Asian American women.

Asian American female faculty, like other minorities and white women, are more likely to be assistant professors, lecturers, or instructors (Figure 8). In 1989, only 10.9 percent of all Asian American female faculty with rank were full professors, and another 17.9 were associate professors.[58] This compares with 29.6 percent of all Asian American male faculty who were full professors and 21.9 percent who were associate professors.[59]

Faculty by Discipline

Larger shares of Asian American faculty work in engineering (13.9 percent), the social sciences (12.3 percent), the physical sciences (11.6 percent), and mathematics or statistics (11.5 percent) than in other academic departments (Table 22). Asian American faculty are least likely to be employed in agriculture or forestry (0.9 percent) and English (1.7 percent). However, as with other racial and ethnic groups, employment patterns for Asian American faculty differ by gender.

The top employment field for Asian American male faculty is engineering; 16.9 percent of all Asian American men employed in higher education work in this area, compared with 13.1 percent in the physical sciences, 12 percent in mathematics or statistics, 11.9 percent in the social sciences, and 11.4 percent in business (Table 22). In contrast, only 1.1 percent of Asian American female faculty are employed in engineering departments. This compares with 18.5 percent who work in health-related departments and 13.8 percent who work in social science departments.

Administration and Management

Compared with other racial and ethnic groups—and compared with their participation within faculty ranks—few Asian Americans are employed in higher education administration. Although significant strides were made during the 1980s in increasing the number of Asian American college and university administrators, this group remains conspicuously underrepresented in administration and management positions. In 1989, only 1.4 percent of all higher education administrators were Asian American (Table 24). Ten years prior, their share of administration and management jobs stood at 0.9 percent. Asian American men outnumber Asian American women in academic administration, according to EEOC 1989 data: 1,191 Asian American men compared with 789 Asian American women were employed in administration and management positions.

Asian Americans are tremendously underrepresented in college presidency. In 1986, 0.4 percent college presidents were Asian Americans.[60] Figures for 1991 indicate that Asian Americans hold 17 college presidencies.[61]

Supply and Demand Issues

As data in the previous sections show, African Americans, American Indians, Hispanics, and U.S.-born Asian Americans remain severely underrepresented on most college and university faculties. This is doubly true for African Americans on predominantly white campuses, since nearly half of all African American faculty are employed on predominantly African American campuses. Frequently cited explanations for the underrepresentation of minority scholars in higher education hinge on concerns about the limited pool of qualified minority applicants, the concentration of minority doctorate-holders in education and in the social sciences, and the declining number of new minority doctorate-holders coupled with their dwindling interest in academic careers. Undeniably, these factors are very significant contributors to the small supply of minority faculty; yet, there is some evidence that colleges and universities are not making maximal use of those who are qualified and available.

Unquestionably, the most effective strategy for increasing the number of African American, American Indian, Hispanic, and Asian American faculty is to increase the pool of minorities with doctorates in competitive fields. There has been a 20 percent decline in African American doctorates since the mid-1970s, caused by a 50 percent drop in the number of doctorates earned by

African American men.[62] Conversely, between 1975 and 1990, Asian Americans and Hispanics doubled the number of doctorates they received, while American Indians nearly tripled their doctoral awards. Although the number of U.S. minority doctorates increased from 1,977 in 1980 to 2,239 in 1990, their respective shares of doctorates remain small in comparison to whites and non—U.S. citizens.[63] In 1990, Asian Americans received only 2.6 percent of U.S. doctorates, Hispanics received 2.9 percent, and American Indians were awarded just 0.4 percent.[64] The corresponding figure for African Americans was 3.4 percent. There is no question about the need to continue to produce larger numbers of minority doctorate-holders, with particular attention being paid to reversing the downward spiral in the number of new African American scholars.

Higher education also loses many new doctorate recipients to other employment sectors. This trend has increased since the mid-1970s. Higher education needs to take a hard look at what kind of efforts must be made to retain larger numbers of new doctorates in teaching and research careers in academe. It is important to note, however, that although recent American Indian, African American, and Hispanic doctorate recipients' commitments to pursuing a career in academe has fallen since the mid-1970s, they are still more likely to enter higher education than their white or Asian American counterparts. Between 1980 and 1990, of U.S.-citizen Ph.D.s with definite post-graduate employment plans, about 57 percent of Hispanics, 55 percent of African Americans, and 55 percent of American Indians were committed to pursuing an academic career..[65] This compares with an average of 50 percent of white recent doctorate-holders and 38 percent of their Asian American counterparts. Clearly, the groups that are the most underrepresented in higher education are also most attracted to college or university employment. Based on the postgraduate employment plans of recent doctorate recipients who were U.S. citizens, approximately 4,600 new African American Ph.D.s between 1979 and 1989 planned college or university employment, compared with about 2,800 Hispanics, 1,450 Asian Americans, and only 458 American Indians. These figures show that, during this period, 4.4 percent of all recent doctorate recipients who planned postgraduate employment in academe were African Americans, another 2.7 percent were Hispanic, and another 1.4 percent Asian American, while 0.4 percent were American Indians. These data for U.S.-citizen Ph.D.s indicate that, given the relatively small number and percentage of Asian American recent doctorate-holders with academic employment plans, much of the faculty employment gains experienced by Asian Americans during the 1980s may be attributed to those without formal citizenship and/or those who already held a doctorate.

As stated earlier, the issue of a small supply of minority faculty does not completely account for the underrepresentation of these groups in many fields or for the underutilization of them in other areas. The underrepresentation of African American, Hispanic, and American Indian doctorates in science and engineering is well documented, and it is a commonly held misperception that minorities in these fields can command such high salaries that most colleges and universities cannot afford them. However, recent data from the National Science Foundation's "1989 Survey of Doctoral Recipients" (SDR) does not support this assertion.[66] General employment data on doctoral scientists and engineers show that African American scientists and engineers, and to some extent, their American Indian counterparts, are more frequently unemployed and underemployed than other racial and ethnic groups.[67] SDR data from 1973 to 1989 show that these discrepancies in employment are long-standing. In 1989, African American scientists and engineers were unemployed at a rate of 3.7 percent, compared with 1.5 percent for American Indians, 0.7 percent for Asian Americans, 0.8 percent for whites, and 0.8 percent for Hispanics. Similarly, 6.5 percent of African American doctorates and 3.1 percent of American Indians in these fields were underutilized,[68] compared with smaller percentages of whites, Asian Americans, and Hispanics—2.1 percent, 1.6 percent, and 2.2 percent, respectively.

African American, American Indian, or Hispanic doctoral scientists or engineers are also slightly more likely to be employed by a college or university than their Asian American or white counterparts. However, with the exception of Asian Americans, minority doctoral scientists and engineers who are employed in higher education are paid $6,500 to $3,000 less than white doctoral scientists and engineers.[69] An Asian American doctoral scientist's or engineer's median salary is comparable to that of whites.[70]

The scope of this report does not permit for a detailed examination of data pertaining to minority hiring trends in higher education. However, EEOC new hires data give some indication that the proportion of newly hired faculty compared to employed faculty was slightly higher for American Indians and African Americans than for other racial and ethnic groups between 1979 and 1989.[71] But, as discussed earlier in this report, neither African Americans nor American Indians experienced growth in their respective shares of faculty positions during this period. This may mean that American Indian and African American faculty are going through the hiring process more frequently than faculty of other racial and ethnic groups. These data may indicate that African American and American Indian faculty are being hired by

institutions but are not being retained as long as other faculty. If in fact the proportion of newly-hired to employed faculty for African Americans and American Indians is equal to or exceeds that of Asian Americans and Hispanics who are gaining in faculty representation, a more complete analysis of faculty hiring and departure trends is definitely needed to determine why American Indian and African American faculty have not experienced growth in their shares of appointments.

Summary and Implications

Minority progress in higher education employment has been uneven at best. Despite the cries of many opponents of affirmative action that too many minorities were being hired because of "special programs" and "hiring quotas," African Americans, Hispanics, and American Indians made only minimal progress during the 1980s in rectifying their long-standing underrepresentation in many areas of academic employment, particularly within the faculty ranks (Figure 9).

While Asian Americans have significantly increased their share of faculty positions, they remain severely underrepresented in administrative and management positions, and more than 40 percent of employed faculty in this group are not U.S. citizens. For American Indians, because so few are employed, the numerical gains they experienced during the 1980s have been too small to significantly increase their share in higher education employment. As in the mid-1970s, nearly half of all African American faculty are employed in HBCUs, which means that only 2.3 percent of the faculty on predominantly white campuses are African Americans. Consequently, African Americans made no progress in increasing their representation on these campuses during the 1980s. Similarly, sizeable numbers of Hispanic faculty hold positions at two-year colleges and at institutions with 25 percent or more Hispanic enrollment.

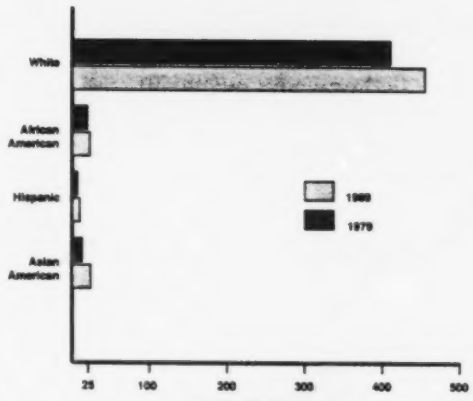
Once employed, minority faculty do not advance in their profession as well as white faculty. American Indians, Hispanics, and African Americans continue to hold disproportionately large shares of faculty positions at the bottom of the professional ladder. Minority faculty also have lower tenure rates than white faculty. Additionally, disproportionately large shares of African Americans, Hispanics, and American Indians are employed in nonfaculty and nonmanagement positions. This is particularly true for women of color. However, on a more positive note, women of all racial and ethnic groups, with the exception of American Indian women, increased their representation in higher education administration during the 1980s.

Affirmative and targeted efforts are still much needed, and, in fact, must be strengthened during the 1990s if higher education is to increase the representation of people of color in faculty and leadership positions. Successful strategies to increase minority faculty are comprised of at least three interdependent components. First, colleges and universities must work to increase the number of doctorates awarded to U.S. citizens, and they must find new ways to interest more recent doctorate recipients in academic careers. This imperative is extremely urgent for U.S. citizens who are African American, American Indian, Hispanic, and Asian American. Institutions can continue to hire the "star" minority faculty away from other institutions, but that will not increase the diversity of higher education faculty overall. The numbers of minorities entering the profession must grow.

Second, institutions must examine hidden assumptions in hiring processes that may unfairly eliminate minority candidates from the pool of "qualified" applicants. Since faculty are almost wholly responsible for selecting their own peers, it is the faculty who control the search and appointment process. Consequently, college and university faculty bear a heavy share of the responsibility for the low numbers of minority faculty."[2] Speaking on effective strategies and programs to increase minority faculty, one of the authors of this report summarized the search process quandary in regard to minority faculty:

> Despite faculty protestation to the contrary, the search gives ample opportunity for conscious and unconscious prejudices to affect judgments of who are "qualified" candidates. For example: Do the candidate's references come from people I know? Is the candidate's research in areas of "broad" interest or is it merely narrow minority research (thus, sickle cell anemia research is not valued as highly as cancer research)? Does the candidate publish in journals that I respect? Is the candidate's undergraduate degree from Radcliffe or from Spelman? The answers to these questions seriously affect

Figure 9
Full-Time Faculty in Higher Education by Race/Ethnicity, 1979 and 1989



Note: The number of American Indian faculty is too small to show on the above graph

Source: U.S. Equal Employment Opportunity Commission, "EEO-6 Higher Education Staff Information" survey, 1979 and 1989

the allegedly "objective" judgment of search committees. As a result some search committees throw up their hands and say, " We'd love to hire a minority, but we can't find one who meets our standards."[3]

Institutions that have been successful in hiring increased numbers of minority faculty understand the barriers. They do not shy away from the fact that the overwhelming majority of the white, male faculty is not so much a consequence of superior talent just rising to the top, as it is the result of a long history of systematic exclusion of African Americans, Hispanics, Asian Americans, American Indians, and white women from the academic enterprise."[4] Achieving change also requires institutional leaders to recognize that many faculty and administrators are content with the current scenario. Therefore, institutions must adopt policies that are truly "affirmative" as well as "active."

Finally, once hired, minority faculty must be retained. Like other faculty, minority faculty must be supported and mentored to achieve success in teaching, research and publication. Departments must guard against expecting minority faculty to assume inordinately high shares of the "caretaking responsibilities" within the department. Minority faculty also should be given the same opportunities as other faculty to participate in informal faculty interactions and networks.

Successful diversity strategies begin with a commitment to increasing diversity. Institutional leaders and faculty must then recognize that goodwill alone is not sufficient, and that aggressive and affirmative actions must be taken, including the long-term commitment of resources. They must understand that continuous and sustained efforts are needed to attract and retain more minority faculty, and that this does not mean hiring one or two minority candidates and then returning to business as usual. As appropriately stated in *Achieving Faculty Diversity*, "Committed institutions understand that attracting and retaining minority scholars from the limited existing supply, though critically important, is only part of the challenge. New diversity plans pay close attention to the whole pipeline. They are comprehensive and aimed at increasing the future supply of minority academics and taking full advantage of the historic opportunity universities will have to diversify, as the post-war professoriate retires between now and 2010."[5]

Notes

1. These data were not imputed for institutions that did not report employment figures. Because of nonreporting by institutions and states, the number of institutions included in the EEO-6 survey is different for each survey period. The different number of reporting institutions will affect percentage change figures, which measure increases or decreases in employment counts over time.

2. U.S. Department of Commerce, Bureau of the Census, *We the First Americans* (Washington, D.C.: Government Printing Office, 1988), 5.

3. Ibid., 10.

4. Bob H. Suzuki, "Asian Americans in Higher Education: A Research Agenda for the 1990s and Beyond," a paper prepared for the American Council on Education's Minority Research Agenda meeting in San Francisco, California, November 1989, 6.

5. U.S. Department of Commerce, Bureau of the Census, *Asian and Pacific Islander Population by State: 1980 Supplementary Report, PC80-S1-12* (Washington, D.C.: U.S. Government Printing Office, 1983).

6. Western Interstate Commission for Higher Education and the College Board, *The Road to College: Educational Progress by Race and Ethnicity* (Boulder, CO: Western Interstate Commission for Higher Education), 2.

7. Ibid., 15, 34–35.

8. Ibid., 15.

9. Ibid., 15.

10. Ibid., 16, 35.

11. U.S. Department of Education, National Center for Education Statistics, *Trends in Racial/Ethnic Enrollment in Higher Education* (Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, 1990), 14.

12. Ibid., 14.

13. U.S. Department of Education, National Center for Education Statistics, *Trends in Racial/Ethnic Enrollment in Higher Education: Fall 1980 Through Fall 1990*, Technical Appendix. In presenting data, NCES cautioned that five states either did not report or underreported enrollment data for two-year colleges. Therefore, NCES imputed 1988 IPEDS survey data for these states to arrive at 1990 enrollment estimates for each state. Imputed data accounted for 34 percent of the data for two-year institutions, compared to less than 10 percent of the data on four-year colleges and universities.

14. Deborah J. Carter and Reginald Wilson, *1990 Ninth Annual Status Report on Minorities in Higher Education* (Washington, D.C.: American Council on Education),4.

15 Enrollment changes for African Americans at non-HBCUs were calculated using data from NCES in Table 4 and National Association for Equal Opportunity Research Institute enrollment data for HBCUs in Table 7.

16. *Trends in Racial/Ethnic Enrollment in Higher Education: Fall 1980 Through Fall 1990*, Technical Appendix.

17. Ibid.

18. Scott Jaschik, "Funds for Higher Education Drop in Year, First Decline Since Survey Began 33 Years Ago, *Chronicle of Higher Education* 38 (11): 1.

19. Same as note 1.

20. Valora Washington and William Harvey, *Affirmative Rhetoric, Negative Action: African-American and Hispanic Faculty at Predominantly White Institutions*, Report No. 2. (Washington, D.C.: School of Education and Human Development, The George Washington University, 1989), 7.

21. Ibid., 7.

22. Ibid., 7.

23. *Educational Record* Winter 1988: 17, 19.

24. U.S. Department of Commerce, Bureau of Labor Statistics, *Current Population Survey: Employment and Earnings* (Washington, D.C.: U.S. Government Printing Office, December 1991).

25. This percentage was calculated from data in Tables 18 and 25 of this report.

26. Ibid.

27. Ibid.

28. Higher Education Research Institute, University of California, Los Angeles, "1989–90 Higher Education Research Institute Faculty Survey," unpublished tabulations, November 1991.

29. This percentage was calculated from data in the "1989-90 HERI Faculty Survey" and data in Table 19 of this report.

30. Higher Education Research Institute, "1989–90 HERI Faculty Survey," unpublished tabulations, November 1991.

31. Ibid.

32. These percentages were calculated from data in Table 21 of this report.

33. Ibid.

34. Madeleine F. Green, *The American College President: A Contemporary Profile* (Washington, D.C.: American Council on Education, 1988), 5.

35. American Council on Education, Department of Membership, unpublished tabulations from the ACE Presidential Database, December 1991.

36. Department of the Census, *Current Population Survey*.

37. Deborah J. Carter and Reginald Wilson, *1990 Ninth Annual Status Report on Minorities in Higher Education* (Washington, D.C.: American Council on Education), 12.

38. Ibid., footnote 25.

39. Ibid.

40. Higher Education Research Institute, "1989–90 HERI Faculty Survey," unpublished tabulations.

41. Ibid.

42. Ibid., footnote 31.

43. Ibid.

44. Ibid.

45. Madeleine F. Green, *The American College President*, 5.

46. American Council on Education, Department of Membership, unpublished tabulations from the ACE Presidential Database.

47. Ibid., footnote 25.

48. Ibid.

49. Higher Education Research Institute, "1989–90 HERI Faculty Survey," unpublished tabulations.

50. National Science Foundation, National Research Council, *Summary Report 1990: Doctorate Recipients for United States Universities* (Washington, D.C.: National Academy Press, 1991), 27–32.

51. U.S. Department of Education, National Center for Education Statistics, *1988 National Survey of Postsecondary Faculty: Faculty in Higher Education Institutions* (Washington, D.C.: U.S. Department of Education, Office of Education Research and Improvement, March 1990), 11.

52. Madeleine F. Green, *The American College President*, 5.

53. American Council on Education, Department of Membership, unpublished tabulations for the ACE Presidential Database.

54. Ibid., footnote 25.

55. Higher Education Research Institute, "1989–90 HERI Faculty Survey," unpublished tabulations.

56. Ibid.

57. Higher Education Research Institute, "1989–90 HERI Faculty Survey," unpublished tabulations.

58. Ibid., footnote 31.

59. Ibid.

60. Madeleine F. Green, *The American College President*, 5.

61. American Council on Education, Department of Membership, unpublished tabulations for the ACE Presidential Database.

62. National Science Foundation, National Research Council, *Summary Report 1990: Doctorate Recipients for United States Universities*, 27–32.

63. Ibid.

64. Ibid.

65. These figures were calculated from the National Research Council, *Summary Report 1990: Doctorate Recipients for United States Universities*, 11.

66. National Science Foundation, Office of Scientific and Engineering Personnel, "1989 Survey of Doctoral Recipients," unpublished tabulations.

67. Ibid.

68. The term underutilized includes three groups of people: those who are unemployed and seeking a job; those who are employed outside their field and are seeking a job in their field; and those who are working part-time, but want full-time employment.

69. Ibid.

70. Ibid.

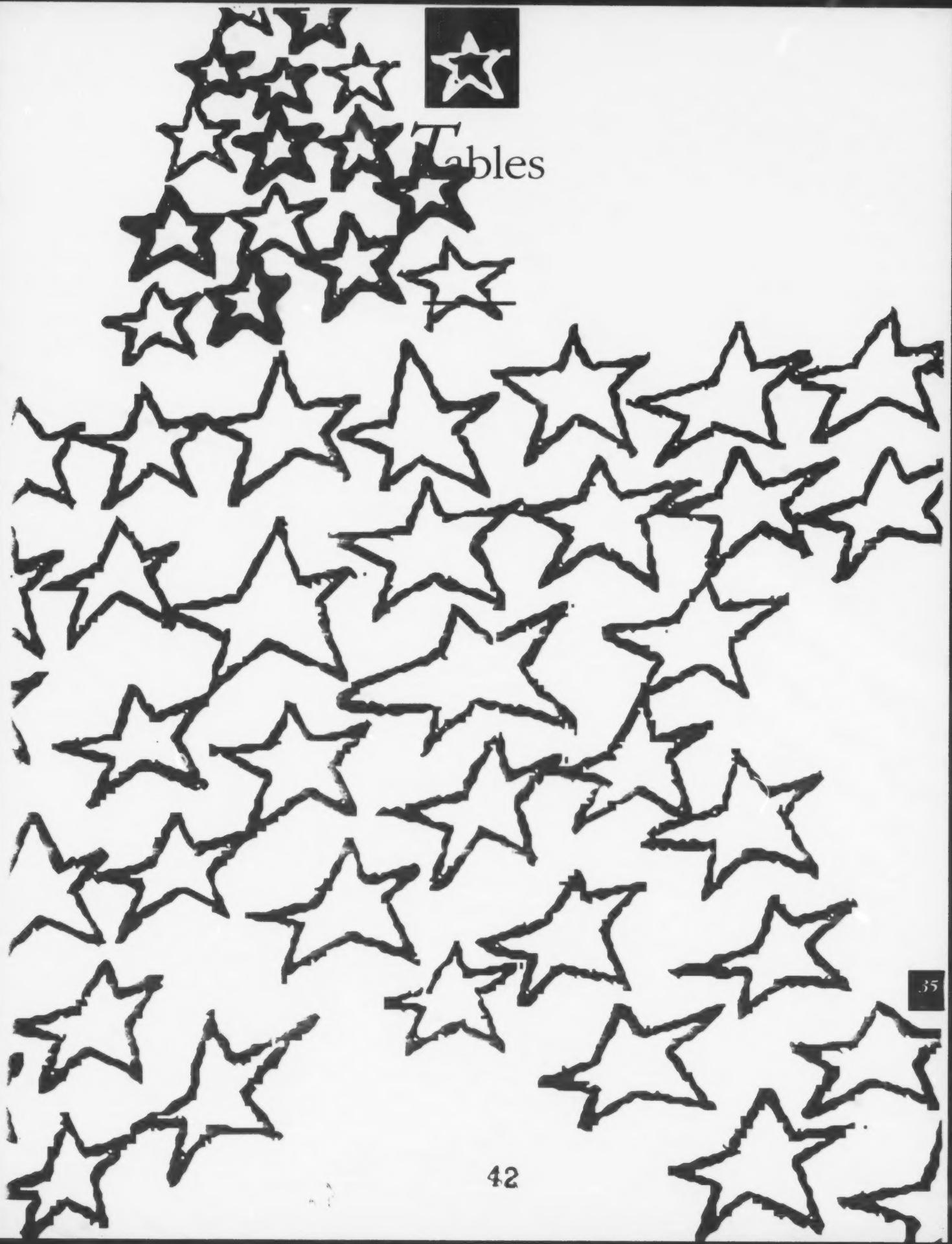
71. These data were calculated from employment data and new-hires data in the EEOC's "EEO-6 Higher Education Staff Information Survey."

72. Reginald Wilson, "Effective Strategies and Programs to Increase Minority Faculty," a paper prepared for the Office of Minority Equity, Lansing, Michigan, November 1989, 8.

73. Ibid, 8.

74. Ibid, 9.

75. University of Wisconsin System, *Achieving Faculty Diversity: A Sourcebook of Ideas and Success Stories* (Madison, WI: University of Wisconsin System, 1988), 49.



Tables

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Table 1
High School Completion Rates and College Participation Rates by Race/Ethnicity, 1970 to 1990

Year	18-to-24-Year-Olds						14-to-24-Year-Olds
			High School Graduates				
	All Persons (thousands)	Enrolled-in-College Participation Rate (percent)	Number Completed (thousands)	Completion Rates (percent)	Number Enrolled in College (thousands)	Enrolled-in-CollegeParticipation Rate (percent)	Ever-Enrolled-in-College Participation Rate (percent)
ALL RACES							
1970	22,552	25.7	17,768	78.8	5,805	32.7	52.3
1971	23,688	26.2	18,691	79.0	6,210	33.2	53.1
1972	24,579	25.5	19,618	79.8	6,257	31.9	52.9
1973	25,237	24.0	20,377	80.7	6,055	29.7	50.7
1974	25,670	24.6	20,725	80.7	6,316	30.5	51.3
1975	26,387	26.3	21,326	80.8	6,935	32.5	52.5
1976	26,919	26.7	21,677	80.5	7,181	33.1	53.4
1977	27,331	26.1	22,008	80.5	7,142	32.5	52.0
1978	27,647	25.3	22,309	80.7	6,995	31.4	51.4
1979	27,974	25.0	22,421	80.1	6,991	31.2	51.6
1980	28,957	25.6	23,413	80.9	7,400	31.6	51.1
1981	28,965	26.2	23,343	80.6	7,575	32.5	51.7
1982	28,846	26.6	23,291	80.7	7,678	33.0	52.7
1983	28,580	26.2	22,988	80.4	7,477	32.5	52.8
1984	28,031	27.1	22,870	81.6	7,591	33.2	53.0
1985	27,122	27.8	22,349	82.4	7,537	33.7	54.3
1986	26,512	28.2	21,768	82.1	7,477	34.3	55.0
1987	25,950	29.6	21,118	81.4	7,693	36.4	56.5
1988	25,733	30.3	20,900	81.2	7,791	37.3	57.5
1989	25,261	30.9	20,461	81.0	7,804	38.1	57.9
1990	24,852	32.0	20,311	82.3	7,964	39.1	58.9
WHITE							
1970	19,608	27.1	15,960	81.4	5,305	33.2	53.4
1971	20,533	27.2	16,593	81.3	5,594	33.5	54.1
1972	21,315	26.4	17,410	81.7	5,624	32.3	53.9
1973	21,766	25.0	18,023	82.8	5,438	30.2	51.6
1974	22,141	25.2	18,318	82.7	5,589	30.5	51.7
1975	22,703	26.9	18,883	83.2	6,116	32.4	52.7
1976	23,119	27.1	19,045	82.4	6,276	33.0	53.5
1977	23,430	26.5	19,291	82.3	6,209	32.2	52.1
1978	23,650	25.7	19,526	82.6	6,077	31.1	51.3
1979	23,895	25.6	19,616	82.1	6,120	31.2	51.7
1980	24,482	26.2	20,214	82.6	6,423	31.8	51.4
1981	24,486	26.7	20,123	82.2	6,549	32.5	52.1
1982	24,206	27.2	19,944	82.4	6,694	33.1	53.1
1983	23,899	27.0	19,643	82.2	6,463	32.9	53.4
1984	23,347	28.0	19,373	83.0	6,256	33.7	53.8
1985	22,632	28.7	18,916	83.6	6,500	34.4	55.3
1986	22,020	28.6	18,291	83.1	6,307	34.5	55.5
1987	21,493	30.2	17,689	82.3	6,483	36.6	57.1
1988	21,261	31.3	17,491	82.3	6,659	38.1	58.6
1989	20,825	31.8	17,089	82.1	6,631	38.8	58.9
1990	20,393	32.5	16,823	82.5	6,635	39.4	60.1

Continued on next page

Table 1 - *Continued*

High School Completion Rates and College Participation Rates by Race/Ethnicity, 1970 to 1990

Year	18-to-24-Year-Olds						14-to-24-Year-Olds
			High School Graduates				
	All Persons (thousands)	Enrolled-in-College Participation Rate (percent)	Number Completed (thousands)	Completion Rates (percent)	Number Enrolled in College (thousands)	Enrolled-in-CollegeParticipation Rate (percent)	Ever-Enrolled-in-College Participation Rate (percent)
AFRICAN AMERICAN							
1970	2,692	15.5	1,602	59.5	416	26.0	39.4
1971	2,866	18.2	1,789	62.4	522	29.2	42.3
1972	2,986	18.1	1,992	66.7	540	27.1	42.0
1973	3,114	16.0	2,079	66.8	498	24.0	41.6
1974	3,105	17.9	2,083	67.1	555	26.6	44.8
1975	3,213	20.7	2,081	64.8	665	32.0	48.1
1976	3,315	22.6	2,239	67.5	749	33.5	50.4
1977	3,387	21.3	2,286	67.5	721	31.5	46.9
1978	3,452	20.1	2,340	67.8	694	29.7	47.8
1979	3,510	19.8	2,356	67.1	696	29.5	48.4
1980	3,721	19.2	2,592	69.7	715	27.6	45.9
1981	3,778	19.9	2,678	70.9	750	28.0	44.8
1982	3,872	19.8	2,744	70.9	767	28.0	45.5
1983	3,865	19.2	2,740	70.9	741	27.0	45.0
1984	3,862	20.4	2,885	74.7	786	27.2	45.2
1985	3,716	19.8	2,810	75.6	734	26.1	43.8
1986	3,653	22.2	2,795	76.5	812	29.1	47.8
1987	3,603	22.8	2,739	76.0	823	30.0	48.7
1988	3,568	21.1	2,680	75.1	752	28.1	46.6
1989	3,559	23.5	2,708	76.1	835	30.8	49.1
1990	3,520	25.4	2,710	77.0	894	33.0	48.0
HISPANIC[a]							
1972	1,338	13.4	694	51.9	179	25.8	36.7
1973	1,285	16.0	709	55.2	206	29.1	43.0
1974	1,506	18.1	842	55.9	272	32.3	47.8
1975	1,446	20.4	832	57.5	295	35.5	50.8
1976	1,551	19.9	862	55.6	309	35.8	48.9
1977	1,609	17.2	880	54.7	277	31.5	43.8
1978	1,672	15.2	935	55.9	254	27.2	43.2
1979	1,754	16.6	968	55.2	292	30.2	45.7
1980	2,033	16.1	1,099	54.1	327	29.8	47.3
1981	2,052	16.7	1,144	55.8	342	29.9	45.8
1982	2,001	16.8	1,153	57.6	337	29.2	47.3
1983	2,025	17.2	1,110	54.8	349	31.4	48.4
1984	2,018	17.9	1,212	60.1	362	29.9	46.0
1985	2,221	16.9	1,396	62.9	375	26.9	46.7
1986	2,514	18.2	1,507	59.9	458	30.4	45.6
1987	2,592	17.6	1,597	61.6	455	28.5	44.2
1988	2,642	17.0	1,458	55.2	450	30.9	47.1
1989	2,818	16.1	1,576	55.9	453	28.7	43.6
1990	2,749	15.8	1,498	54.5	435	29.0	44.7

Source: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, School Enrollment—Social and Economic Characteristics of Students: October 1989*, Series P-20, No. 452, and unpublished tabulations for October 1990.

Note: College participation rates were calculated using the total population and high school graduates as the bases. The ever-enrolled-in-college participation rate includes 14-to-24-year-olds who were either enrolled in college or had completed one or more years of college. The high school completion rates were calculated using the total population as the base. Thus, in 1970, 78.8 percent of the total population 18-to-24 years old had earned a high school diploma or a high school equivalency certificate or were enrolled in college. Data for 1980 and later use 1980 census-based estimates. Data for 1986 and later use a revised tabulation system. Improvements in edits and population estimation procedures caused slight changes in estimates for 1986.

[a] Hispanics may be of any race. Data before 1972 are unavailable for Hispanics.

Table 2
High School Completion Rates and College Participation Rates by Race/Ethnicity and Sex, 1970 to 1990

Year	18-to-24-Year-Olds						14-to-24-Year-Olds
			High School Graduates				
	All Persons (thousands)	Enrolled-in-College Participation Rate (percent)	Number Completed (thousands)	Completion Rates (percent)	Number Enrolled in College (thousands)	Enrolled-in-CollegeParticipation Rate (percent)	Ever-Enrolled-in-College Participation Rate (percent)
ALL RACES							
MEN							
1970	10,385	32.1	8,087	77.9	3,331	41.2	59.2
1971	11,092	32.4	8,669	78.2	3,599	41.5	60.1
1972	11,712	30.2	9,247	79.0	3,534	38.2	59.0
1973	12,111	27.7	9,716	80.2	3,360	34.6	55.4
1974	12,315	27.7	9,835	79.9	3,411	34.7	55.6
1975	12,724	29.0	10,214	80.3	3,693	36.2	56.1
1976	13,012	28.2	10,312	79.2	3,673	35.6	55.7
1977	13,218	28.1	10,440	79.0	3,712	35.6	54.2
1978	13,385	27.1	10,614	79.3	3,621	34.1	52.6
1979	13,571	25.8	10,657	78.5	3,508	32.9	52.4
1980	14,107	26.3	11,125	78.9	3,717	33.4	51.4
1981	14,127	27.1	11,052	78.2	3,833	34.7	52.1
1982	14,083	27.2	11,120	79.0	3,837	34.5	53.0
1983	14,003	27.3	10,906	77.9	3,820	35.0	52.7
1984	13,744	28.6	10,914	79.4	3,929	36.0	53.6
1985	13,199	28.4	10,614	80.4	3,749	35.3	54.6
1986	12,921	28.7	10,338	80.0	3,702	35.8	54.4
1987	12,626	30.6	10,030	79.4	3,867	38.6	56.3
1988	12,491	30.2	9,832	78.7	3,770	38.3	56.6
1989	12,325	30.2	9,700	78.7	3,717	38.3	57.2
1990	12,134	32.3	9,778	80.6	3,922	40.1	58.0
WOMEN							
1970	12,167	20.3	9,680	79.6	2,474	25.6	46.6
1971	12,576	20.8	10,020	79.7	2,610	26.0	47.1
1972	12,867	21.2	10,371	80.6	2,724	26.3	47.4
1973	13,126	20.5	10,663	81.2	2,696	25.3	46.5
1974	13,355	21.8	10,889	81.5	2,905	26.7	47.5
1975	13,663	23.7	11,113	81.3	3,243	29.2	49.2
381976	13,907	25.2	11,365	81.7	3,508	30.9	51.4
1977	14,113	24.3	11,569	82.0	3,431	29.7	50.0
1978	14,262	23.7	11,694	82.0	3,373	28.8	50.3
1979	14,403	24.2	11,763	81.7	3,482	29.6	50.8
1980	14,851	24.8	12,287	82.7	3,682	30.0	50.8
1981	14,838	25.2	12,290	82.8	3,741	30.4	51.3
1982	14,763	26.0	12,171	82.4	3,841	31.6	52.4
1983	14,577	25.1	12,082	82.9	3,657	30.3	52.8
1984	14,287	25.6	11,956	83.7	3,662	30.6	52.4
1985	13,923	27.2	11,736	84.3	3,788	32.3	54.0
1986	13,591	27.8	11,430	84.1	3,775	33.0	55.5
1987	13,324	28.7	11,086	83.2	3,826	34.5	56.7
1988	13,242	30.4	11,068	83.6	4,021	36.3	58.3
1989	12,936	31.6	10,758	83.2	4,085	38.0	58.6
1990	12,718	31.8	10,533	82.8	4,042	38.4	59.8

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Source: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, School Enrollment—Social and Economic Characteristics of Students: October 1989, Series P-20, No. 452* and unpublished tabulations for October 1990.

Note: The number of high school graduates was calculated by adding the numbers of individuals in this age group enrolled in college as of October of that year and the number of high school graduates not enrolled in college; these figures include individuals who enrolled in college without receiving a high school diploma or a GED. Data for 1980 and later use 1980 census-based estimates. Data for 1986 and later use a revised tabulation system. Improvements in edits and population estimation procedures caused slight changes in the estimates for 1986.

Table 2 - *Continued*

High School Completion Rates and College Participation Rates by Race/Ethnicity and Sex, 1970 to 1990

Year	18-to-24-Year-Olds						14-to-24-Year-Olds
			High School Graduates				
	All Persons (thousands)	Enrolled-in-College Participation Rate (percent)	Number Completed (thousands)	Completion Rates (percent)	Number Enrolled in College (thousands)	Enrolled-in-CollegeParticipation Rate (percent)	Ever-Enrolled-in-College Participation Rate (percent)
WHITE							
MEN							
1970	9,053	34.2	7,324	80.9	3,096	42.3	60.9
1971	9,653	34.0	7,807	80.9	3,284	42.1	61.4
1972	10,212	31.3	8,278	81.1	3,195	38.6	60.1
1973	10,511	28.8	8,637	82.2	3,032	35.1	56.5
1974	10,722	28.3	8,768	81.8	3,035	34.6	55.9
1975	11,050	30.1	9,139	82.7	3,326	36.4	56.6
1976	11,279	28.8	9,186	81.4	3,250	35.4	55.9
1977	11,445	28.7	9,263	80.9	3,286	35.5	54.5
1978	11,572	27.6	9,438	81.6	3,195	33.9	52.5
1979	11,721	26.5	9,457	80.7	3,104	32.8	52.7
1980	12,011	27.3	9,686	80.6	3,275	33.8	51.8
1981	12,040	27.7	9,619	79.9	3,340	34.7	52.8
1982	11,874	27.9	9,611	80.9	3,308	34.4	53.2
1983	11,787	28.3	9,411	79.8	3,335	35.4	53.5
1984	11,521	29.6	9,348	81.1	3,406	36.4	54.2
1985	11,108	29.3	9,077	81.7	3,254	35.8	55.5
1986	10,814	29.3	8,780	81.2	3,168	36.1	55.1
1987	10,549	31.2	8,498	80.6	3,289	38.7	56.7
1988	10,380	31.4	8,268	79.7	3,260	39.4	57.9
1989	10,240	31.5	8,177	79.9	3,223	39.4	58.5
1990	10,053	32.7	8,157	81.1	3,292	40.3	58.7
WOMEN							
1970	10,555	20.9	8,634	81.8	2,209	25.6	47.2
1971	10,880	21.2	8,887	81.7	2,310	26.0	47.7
1972	11,103	21.9	9,132	82.2	2,428	26.6	48.3
1973	11,255	21.4	9,387	83.4	2,406	25.6	47.1
1974	11,419	22.4	9,551	83.6	2,555	26.8	47.8
1975	11,653	23.9	9,743	83.6	2,790	28.6	49.1
1976	11,840	25.6	9,860	83.3	3,026	30.7	51.3
1977	11,985	24.4	10,029	83.7	2,923	29.1	50.0
1978	12,078	23.9	10,088	83.5	2,882	28.6	50.3
1979	12,174	24.8	10,157	83.4	3,015	29.7	50.8
1980	12,471	25.2	10,528	84.4	3,147	29.9	50.9
1981	12,446	25.8	10,504	84.4	3,208	30.5	51.6
1982	12,332	26.6	10,333	83.8	3,285	31.8	52.9
1983	12,112	25.8	10,233	84.5	3,129	30.6	53.4
1984	11,826	26.4	10,026	84.8	3,120	31.1	53.4
1985	11,524	28.2	9,840	85.4	3,247	33.0	55.2
1986	11,205	28.0	9,509	84.9	3,139	33.0	55.8
1987	10,944	29.2	9,189	84.0	3,192	34.7	57.5
1988	10,881	31.2	9,223	84.8	3,399	36.9	59.2
1989	10,586	32.2	8,913	84.2	3,409	38.2	59.2
1990	10,340	32.3	8,666	83.8	3,344	38.6	61.4

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Table 2 - *Continued*

High School Completion Rates and College Participation Rates by Race/Ethnicity and Sex, 1970 to 1990

Year	18-to-24-Year-Olds						14-to-24-Year-Olds
			High School Graduates				
	All Persons (thousands)	Enrolled-in-College Participation Rate (percent)	Number Completed (thousands)	Completion Rates (percent)	Number Enrolled in College (thousands)	Enrolled-in-CollegeParticipation Rate (percent)	Ever-Enrolled-in-College Participation Rate (percent)
AFRICAN AMERICAN							
MEN							
1970	1,220	15.7	668	54.8	192	28.7	41.4
1971	1,318	19.9	769	58.3	262	34.1	45.8
1972	1,373	20.9	870	63.4	287	33.0	47.4
1973	1,434	18.5	952	66.4	266	27.9	44.2
1974	1,396	20.1	919	65.8	280	30.5	47.3
1975	1,451	20.3	897	61.8	294	32.8	50.5
1976	1,503	22.0	936	62.3	331	35.4	50.3
1977	1,528	20.2	970	63.5	309	31.9	47.6
1978	1,554	19.6	956	61.5	305	31.9	49.3
1979	1,577	19.3	973	61.7	304	31.2	46.7
1980	1,690	17.3	1,115	66.0	293	26.3	44.1
1981	1,730	18.8	1,154	66.7	325	28.2	42.3
1982	1,786	18.5	1,171	65.6	331	28.3	44.5
1983	1,807	18.3	1,202	66.5	331	27.5	43.6
1984	1,811	20.3	1,272	70.2	367	28.9	45.2
1985	1,720	20.1	1,244	72.3	345	27.7	43.6
1986	1,687	20.7	1,220	72.3	349	28.6	44.4
1987	1,666	22.6	1,188	71.3	377	31.7	48.3
1988	1,653	18.0	1,189	71.9	297	25.0	42.8
1989	1,654	19.6	1,195	72.2	324	27.1	45.8
1990	1,634	26.1	1,240	75.9	426	34.4	48.9
WOMEN							
1970	1,471	15.3	935	63.6	225	24.1	39.3
1971	1,547	16.7	1,019	65.9	259	25.4	39.8
1972	1,613	15.7	1,123	69.6	253	22.5	37.9
1973	1,681	13.7	1,125	66.9	231	20.5	39.4
1974	1,709	16.2	1,167	68.3	277	23.7	42.9
1975	1,761	21.1	1,182	67.1	372	31.5	46.4
1976	1,813	23.0	1,302	71.8	417	32.0	50.3
1977	1,859	22.2	1,317	70.8	413	31.4	46.2
1978	1,897	20.6	1,384	73.0	390	28.2	46.7
1979	1,934	20.3	1,383	71.5	392	28.3	49.8
1980	2,031	20.8	1,475	72.6	422	28.6	47.4
1981	2,049	20.7	1,526	74.5	424	27.8	46.6
1982	2,086	20.9	1,572	75.4	436	27.7	46.3
1983	2,058	20.0	1,539	74.8	411	26.7	46.3
1984	2,052	20.4	1,613	78.6	419	26.0	45.1
1985	1,996	19.5	1,565	78.4	389	24.9	44.0
1986	1,966	23.5	1,576	80.1	462	29.4	50.4
1987	1,937	23.0	1,550	80.0	445	28.7	48.9
1988	1,915	23.8	1,492	77.9	455	30.5	49.6
1989	1,905	26.8	1,511	79.3	511	33.8	51.8
1990	1,886	24.8	1,468	77.8	467	31.8	47.3

Continued on next page

Table 2 - *Continued*

High School Completion Rates and College Participation Rates by Race/Ethnicity and Sex, 1970 to 1990

Year	18-to-24-Year-Olds						14-to-24-Year-Olds
			High School Graduates				
	All Persons (thousands)	Enrolled-in-College Participation Rate (percent)	Number Completed (thousands)	Completion Rates (percent)	Number Enrolled in College (thousands)	Enrolled-in-CollegeParticipation Rate (percent)	Ever-Enrolled-in-College Participation Rate (percent)
HISPANIC[a]							
MEN							
1972	609	15.1	301	49.4	92	30.6	44.3
1973	625	16.8	348	55.7	105	30.2	45.4
1974	720	19.6	390	54.2	141	36.2	51.4
1975	678	21.4	383	56.5	145	37.9	55.4
1976	701	21.4	378	53.9	150	39.7	51.8
1977	754	18.4	396	52.5	139	35.1	46.5
1978	781	16.1	420	53.8	126	30.0	46.3
1979	837	18.3	454	54.2	153	33.7	49.5
1980	1,012	15.8	518	51.2	160	30.9	49.5
1981	988	16.6	498	50.4	164	32.9	48.6
1982	944	14.9	519	55.0	141	27.2	44.8
1983	968	15.7	476	49.2	152	31.9	47.4
1984	956	16.1	549	57.4	154	28.1	45.7
1985	1,132	14.8	659	58.2	168	25.5	44.9
1986	1,339	17.4	769	57.4	233	30.3	44.4
1987	1,337	18.5	795	59.5	247	31.1	45.1
1988	1,375	16.6	724	52.7	228	31.5	48.4
1989	1,439	14.7	756	52.5	211	27.9	42.7
1990	1,403	15.3	753	53.7	214	28.4	46.5
WOMEN							
1972	728	12.1	394	54.1	88	22.3	31.1
1973	658	15.5	362	55.0	102	28.2	41.1
1974	786	16.4	451	57.4	129	28.6	43.4
1975	769	19.5	449	58.4	150	33.4	46.7
1976	850	18.8	483	56.8	160	33.1	46.5
1977	855	16.3	483	56.5	139	28.8	41.6
1978	891	14.4	516	57.9	128	24.8	40.0
1979	917	15.3	516	56.3	140	27.1	42.3
1980	1,021	16.2	579	56.7	165	28.5	45.4
1981	1,064	16.7	646	60.7	178	27.6	43.4
1982	1,056	18.6	634	60.0	196	30.9	49.2
1983	1,057	18.7	634	60.0	198	31.2	49.7
1984	1,061	19.5	661	62.3	207	31.3	46.6
1985	1,091	18.8	734	67.3	205	27.9	48.0
1986	1,175	19.2	739	62.9	226	30.6	46.8
1987	1,256	16.6	801	63.8	208	26.0	43.2
1988	1,267	17.7	736	58.1	224	30.4	46.0
1989	1,377	17.7	823	59.8	244	29.6	44.5
1990	1,346	16.4	745	55.3	221	29.7	43.0

[a] Hispanics may be of any race. Data prior to 1972 are unavailable for Hispanics.

Table 3
Public High School Graduates by Region, 1985-86 to 1994-95

	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
SOUTH/SOUTH CENTRAL TOTAL	735,130	753,880	780,060	787,380	751,190	725,420	716,650	723,720	713,830	739,700
White	511,790	528,450	547,560	545,560	509,090	486,570	478,050	476,850	468,080	484,810
Total Minority	223,340	225,430	232,500	241,820	242,100	238,850	238,600	246,870	245,750	254,890
African American	163,960	163,720	168,540	171,810	167,410	162,290	158,660	162,230	159,600	165,960
Hispanic	46,500	48,490	49,590	54,250	58,450	59,930	63,090	67,220	68,070	70,050
Asian American[a]	7,930	8,570	9,530	10,610	11,220	11,680	11,990	12,650	13,140	13,590
American Indian[b]	4,950	4,650	4,840	5,150	5,020	4,950	4,860	4,770	4,940	5,290
WEST TOTAL	447,770	464,990	488,770	480,480	451,420	445,210	454,390	468,480	480,050	505,150
White	317,960	328,500	342,560	330,250	301,350	289,050	289,890	293,330	298,910	314,100
Total Minority	129,810	136,490	146,210	150,230	150,070	156,160	164,500	175,150	181,140	191,050
African American	23,580	24,500	25,360	24,830	22,590	22,010	22,190	23,210	23,460	24,710
Hispanic	61,250	64,270	68,000	72,240	73,100	78,090	84,540	91,900	95,150	101,350
Asian American[a]	36,740	39,210	44,010	44,380	46,070	47,620	49,140	51,250	53,610	55,420
American Indian[b]	8,240	8,510	8,840	8,780	8,310	8,440	8,630	8,790	8,920	9,570
NORTH CENTRAL TOTAL	654,660	653,290	674,660	663,600	613,190	580,230	571,310	583,120	573,930	598,880
White	574,040	572,700	588,780	574,920	529,730	499,760	491,760	500,670	491,990	513,860
Total Minority	80,620	80,590	85,880	88,680	83,460	80,470	79,550	82,450	81,940	85,020
African American	60,320	59,370	62,800	64,240	59,290	56,230	54,000	56,070	54,680	56,950
Hispanic	10,670	10,900	11,940	12,630	12,590	12,330	13,250	13,650	14,460	15,060
Asian American[a]	6,730	7,380	8,190	8,620	8,670	9,090	9,450	9,770	9,920	10,010
American Indian[b]	2,900	2,940	2,950	3,190	2,910	2,820	2,850	2,960	2,880	3,000
NORTHEAST TOTAL	553,860	553,500	561,610	535,090	492,970	464,830	454,620	452,790	449,490	463,810
White	452,370	451,120	455,680	431,470	392,630	367,350	357,960	351,820	346,570	356,620
Total Minority	101,490	102,380	105,930	103,620	100,340	97,480	96,660	100,970	102,920	107,190
African American	68,500	67,650	69,130	65,810	61,860	58,420	56,620	58,010	58,040	60,500
Hispanic	21,630	22,170	23,280	22,840	22,610	22,560	22,860	24,800	25,860	26,820
Asian American[a]	10,700	11,840	12,810	14,080	15,000	15,630	16,260	17,290	18,210	19,070
American Indian[b]	660	720	710	890	870	870	920	870	810	800
ALL REGIONS	2,391,380	2,425,640	2,505,070	2,466,540	2,308,770	2,215,690	2,196,950	2,228,100	2,217,300	2,307,540
White	1,856,150	1,880,760	1,934,570	1,882,200	1,732,810	1,642,730	1,617,650	1,622,660	1,605,550	1,669,380
Total Minority	535,230	544,880	570,500	584,340	575,960	572,960	579,300	605,440	611,750	638,160
African American	316,350	315,240	325,820	326,690	311,150	298,950	291,460	299,520	295,780	308,120
Hispanic	140,040	145,830	152,800	161,960	166,750	172,910	183,740	197,560	203,540	213,290
Asian American[a]	62,090	66,990	74,540	77,680	80,950	84,020	86,840	90,960	94,890	98,090
American Indian[b]	16,750	16,820	17,340	18,010	17,110	17,080	17,260	17,400	17,540	18,660

Source: Western Interstate Commission for Higher Education and The College Board. *The Road to College: Educational Process by Race and Ethnicity.* Boulder, CO: Western Interstate Commisison for Higher Education, July 1991.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

Table 4
Total Enrollment in Higher Education by Type of Institution and Race/Ethnicity: Biennially, Fall 1980 to 1990

	(Numbers in Thousands)						Percent Change
	1980	1982	1984	1986	1988	1990	1988-90
ALL INSTITUTIONS	12,087	12,388	12,235	12,504	13,043	13,710	5.1
White (non-Hispanic)	9,833	9,997	9,815	9,921	10,283	10,675	3.8
Total Minority	1,949	2,059	2,085	2,238	2,400	2,639	10.0
African American (non-Hispanic)	1,107	1,101	1,076	1,082	1,130	1,223	8.2
Hispanic	472	519	535	618	680	758	11.5
Asian American[a]	286	351	390	448	497	555	11.7
American Indian[b]	84	88	84	90	93	103	10.8
Nonresident Alien	305	331	335	345	361	397	10.0
FOUR-YEAR INSTITUTIONS	7,565	7,648	7,708	7,824	8,175	8,529	4.3
White (non-Hispanic)	6,275	6,306	6,301	6,337	6,582	6,757	2.7
Total Minority	1,050	1,073	1,124	1,195	1,292	1,450	12.2
African American (non-Hispanic)	634	612	617	615	656	715	9.0
Hispanic	217	229	246	278	296	344	16.2
Asian American[a]	162	193	223	262	297	343	15.5
American Indian[b]	37	39	38	40	42	48	14.3
Nonresident Alien	241	270	282	292	302	322	6.6
TWO-YEAR INSTITUTIONS[c]	4,521	4,740	4,527	4,680	4,868	5,181	6.4
White (non-Hispanic)	3,558	3,692	3,514	3,584	3,702	3,918	5.8
Total Minority	899	987	961	1,043	1,107	1,189	7.4
African American (non-Hispanic)	472	489	459	467	473	509	7.6
Hispanic	255	291	289	340	384	414	7.8
Asian American[a]	124	158	167	186	199	212	6.5
American Indian[b]	47	49	46	51	50	54	8.0
Nonresident Alien	64	61	53	53	60	75	25.0

Source: U.S. Department of Education, National Center for Education Statistics, *Trends in Racial/Ethnic Enrollment in Higher Education: Fall 1980 through Fall 1990*. Washington, D.C.: U.S. Department of Education, December 1991.

Note: Includes estimates for nonresponse and underreporting. Details may not add to total because of rounding.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

[c] The reader should be cautious in interpreting 1990 data for two-year institutions. Approximately 34 percent of the two-year data had to be imputed to adjust for underreporting and nonreporting in the following five states: California, Florida, Hawaii, Indiana, and South Dakota.

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Table 5
Total Enrollment in Higher Education by Control of Institution, Race/Ethnicity, and Sex: Biennially, Fall 1980 to 1990

	(Numbers in Thousands)						Percent Change
	1980	1982	1984	1986	1988	1990	1988-90
MEN	5,868	5,999	5,859	5,885	5,998	6,239	4.0
White (non-Hispanic)	4,773	4,830	4,690	4,647	4,712	4,841	2.7
Total Minority	885	939	939	1,004	1,051	1,150	9.4
African American (non-Hispanic)	464	458	437	436	443	476	7.4
Hispanic	232	252	254	290	310	344	11.0
Asian American[a]	151	189	210	239	259	287	10.8
American Indian[b]	38	40	38	39	39	43	10.3
Nonresident Alien	211	230	231	233	235	248	5.5
WOMEN	6,219	6,389	6,376	6,619	7,045	7,472	6.1
White (non-Hispanic)	5,060	5,167	5,125	5,273	5,572	5,834	4.7
Total Minority	1,064	1,121	1,146	1,234	1,347	1,489	10.5
African American (non-Hispanic)	643	644	639	646	687	747	8.7
Hispanic	240	267	281	328	370	414	11.9
Asian American[a]	135	162	180	209	237	268	13.1
American Indian[b]	46	48	46	51	53	60	13.2
Nonresident Alien	94	101	104	112	126	149	18.3
PUBLIC	9,456	9,695	9,458	9,714	10,156	10,741	5.8
White (non-Hispanic)	7,656	7,785	7,543	7,654	7,964	8,340	4.7
Total Minority	1,596	1,692	1,695	1,836	1,955	2,135	9.2
African American (non-Hispanic)	876	873	844	854	881	952	8.1
Hispanic	406	446	456	532	587	648	10.4
Asian American[a]	240	296	323	371	406	445	9.6
American Indian[b]	74	77	72	79	81	90	11.1
Nonresident Alien	204	219	219	224	238	265	11.3
INDEPENDENT	2,630	2,693	2,777	2,790	2,887	2,970	2.9
White (non-Hispanic)	2,177	2,212	2,272	2,267	2,319	2,335	0.7
Total Minority	354	367	389	402	443	502	13.3
African American (non-Hispanic)	231	228	232	228	248	271	9.3
Hispanic	66	74	79	86	93	110	18.3
Asian American[a]	47	55	67	77	91	109	19.8
American Indian[b]	10	10	11	11	11	12	9.1
Nonresident Alien	101	113	116	120	123	132	7.3

Source: U.S. Department of Education, National Center for Education Statistics, *Trends in Racial/Ethnic Enrollment in Higher Education: Fall 1980 through Fall 1990*. Washington, D.C.: U.S. Department of Education, December 1991.

Note: Includes estimates for nonresponse and underreporting. Details may not add to total because of rounding.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

Table 6
Undergraduate, Graduate, and Professional School Enrollment in Higher Education by Race/Ethnicity: Biennially, Fall 1980 to 1990

	(Numbers in Thousands)						Percent Change
	1980	1982	1984	1986	1988	1990	1988-90
UNDERGRADUATE TOTAL	10,560	10,875	10,610	10,798	11,304	11,863	4.9
White (non-Hispanic)	8,556	8,749	8,484	8,558	8,907	9,231	3.6
Total Minority	1,797	1,907	1,911	2,036	2,192	2,406	9.8
African American (non-Hispanic)	1,028	1,028	995	996	1,039	1,124	8.2
Hispanic	438	485	495	563	631	702	11.3
Asian American[a]	253	313	343	393	437	485	11.0
American Indian[b]	79	82	78	83	86	95	10.5
Nonresident Alien	208	220	216	205	205	226	10.
GRADUATE TOTAL	1,250	1,235	1,344	1,435	1,472	1,574	6.9
White (non-Hispanic)	1,030	1,002	1,087	1,133	1,153	1,221	5.9
Total Minority	125	123	141	167	167	187	12.0
African American (non-Hispanic)	66	61	67	72	76	84	10.5
Hispanic	27	27	32	46	39	46	17.9
Asian American[a]	28	30	37	43	46	52	13.0
American Indian[b]	4	5	5	5	6	6	0.0
Nonresident Alien	94	108	115	136	151	165	9.3
PROFESSIONAL SCHOOL TOTAL	277	278	278	270	267	274	2.6
White (non-Hispanic)	248	246	243	231	223	222	-0.4
Total Minority	26	29	32	36	39	46	17.9
African American (non-Hispanic)	13	13	13	14	14	16	14.3
Hispanic	7	7	8	9	9	10	11.1
Asian American[a]	6	8	9	11	14	18	28.6
American Indian[b]	1	1	1	1	1	1	0.0
Nonresident Alien	3	3	3	4	5	5	0.0

Source: U.S. Department of Education, National Center for Education Statistics, *Trends in Racial/Ethnic Enrollment: Fall 1980 through Fall 1990* Washington, D.C.: U.S. Department of Education, December 1991.

Note: Includes estimates for nonresponse and underreporting. Details may not add to total because of rounding.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

Table 7
Enrollment in Historically Black Colleges and Universities by Race/Ethnicity: Biennially, Fall 1980 to 1990

	1980	1982	1984	1986	1987	1988	1989	1990	Percent Change 1988-90
Number of HBCUs[a]	102	100	104	104	104	106	104	104	0.0
Total Enrollment	222,220	216,570	216,050	213,114	217,670	230,758	238,946	248,697	7.8
African American (non-Hispanic)	185,780	177,000	175,110	176,610	182,020	192,848	199,974	207,547	7.6
White (non-Hispanic)	21,480	23,040	23,450	22,784	23,227	25,767	26,962	29,601	14.9
Asian American[b]	1,340	1,050	1,350	1,207	1,187	1,473	1,568	1,724	17.0
Hispanic	1,030	1,070	1,560	1,486	1,590	1,746	1,859	1,797	2.9
American Indian[c]	400	570	240	482	449	254	307	338	33.1
Nonresident Alien	12,200	13,840	14,340	10,545	8,897	8,671	8,273	7,690	-11.3

Sources: Hill, Susan T. *The Traditionally Black Institutions of Higher Education, 1860 to 1982.* Washington, D.C.: Government Printing Office, 1984.
National Association for Equal Opportunity Research Institute staff analysis of the U.S. Department of Education, Office for Civil Rights unpublished data, Fall 1984, and 1986-1990.

Note: Details may not add to total because of rounding.

[a] These figures represent the number of institutions reporting their enrollment each year.

[b] Asian American includes Pacific Islanders.

[c] American Indian includes Alaskan Natives.

Table 8
African American Enrollment in Historically Black Colleges and Universities by Control of Insititution and Sex, Fall 1980 to 1990

	1986	1987	1988	1989	1990	Percent Change 1988-90
NUMBER OF HBCUs	104	104	106	104	104	0.0
ALL HBCUs	176,610	182,020	192,848	199,974	207,547	7.6
Men	73,495	74,447	77,741	79,462	82,587	6.2
Women	103,115	107,573	115,107	120,512	124,960	8.6
PUBLIC HBCUs	120,930	124,749	132,067	137,190	143,763	8.9
Men	50,592	51,177	53,206	54,400	57,070	7.3
Women	70,338	73,572	78,861	82,790	86,693	9.9
INDEPENDENT HBCUs	55,680	57,271	60,781	62,784	63,784	9.6
Men	22,903	23,270	24,535	25,062	25,517	7.7
Women	32,777	34,001	36,246	37,722	38,267	10.9

Source: National Association for Equal Opportunity in Higher Education Research Institute Annual Fall Enrollment Survey: 1986-1990.

Table 9
Associate Degrees by Race/Ethnicity and Sex, 1985, 1987, and 1990

	1985		1987		1989		Percent Change
	Total	Percent	Total	Percent	Total	Percent	1987-89
Total	429,815	100.0	436,299	100.0	429,946	100.0	-1.5
Men[a]	190,409	44.3	190,832	43.7	182,909	42.5	-4.2
Women[b]	239,406	55.7	245,467	56.3	247,037	57.5	0.6
White (non-Hispanic)	355,343	82.7	361,819	82.9	353,122	82.1	-2.4
Men	157,278	82.6	158,126	82.9	150,073	82.0	-5.1
Women	198,065	82.7	203,693	83.0	203,049	82.2	-0.3
Minority	68,065	15.8	69,792	16.0	70,456	16.4	1.0
Men	29,435	15.5	30,146	15.8	29,633	16.2	-1.7
Women	38,630	16.1	39,646	16.2	40,823	16.5	3.0
Hispanic	19,407	4.5	19,345	4.4	20,294	4.7	4.9
Men	8,561	4.5	8,764	4.6	9,172	5.0	4.7
Women	10,846	4.5	10,581	4.3	11,122	4.5	5.1
African American (non-Hispanic)	35,799	8.3	35,457	8.1	34,411	8.0	-3.0
Men	14,192	7.5	13,947	7.3	12,826	7.0	-8.0
Women	21,607	9.0	21,510	8.8	21,585	8.7	0.3
Asian American[c]	9,914	2.3	11,794	2.7	12,433	2.9	5.4
Men	5,492	2.9	6,172	3.2	6,320	3.5	2.4
Women	4,422	1.8	5,622	2.3	6,113	2.5	8.7
American Indian[d]	2,953	0.7	3,196	0.7	3,318	0.8	3.8
Men	1,198	0.6	1,263	0.7	1,315	0.7	4.1
Women	1,755	0.7	1,933	0.8	2,003	0.8	3.6
Nonresident Alien	6,407	1.5	4,688	1.1	6,368	1.5	35.8
Men	3,696	1.9	2,560	1.3	3,203	1.8	25.1
Women	2,711	1.1	2,128	0.9	3,165	1.3	48.7

Source: U.S. Department of Education, National Center for Education Statistics, *Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education: 1978-79 through 1988-89*. Washington, D.C.: Office of Educational Research and Improvement, January 1991.

Note: Tabulations for years prior to 1985 did not disaggregate associate degrees from less than two year awards. Therefore, the data for earlier years are not shown. 1985 figures in this table exclude degree recipients whose racial/ethnic status and major field of study could not be imputed; therefore, totals may be smaller than those reported elsewhere. Detail may not sum to totals because of rounding. The percentage figures for men in each subgroup (Minority, Hispanic, African American, etc.) show the associate degrees awarded to men in that subgroup as a percentage of all associate degrees awarded to men. The percentage figures for women in each subgroup show the associate degrees awarded to women in that subgroup as a percentage of all associate degrees awarded to women. The percentage figures on the total line for each subgroup show the associate degrees awarded to all members of that subgroup as a percentage of all associate degrees.

[a] Figures in the percent columns of this line show the number of degrees awarded to men as a percentage of all degrees awarded in the year specified.

[b] Figures in the percent columns of this line show the number of degrees awarded to women as a percentage of all degrees awarded in the year specified.

[c] Asian American includes Pacific Islanders.

[d] American Indian includes Alaskan Natives.

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Table 10
Bachelor's Degrees by Race/Ethnicity and Sex for Selected Years

	1976		1981		1985		1987		1989		Percent Change
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent	1987-89
Total	918,388	100.0	934,800	100.0	968,311	100.0	991,260	100.0	1,015,29	100.0	2.4
Men	499,602	54.4[a]	469,625	50.2	476,148	49.2	480,780	48.5	481,687	47.4	0.2
Women	418,786	45.6[b]	465,175	49.8	492,163	50.8	510,480	51.5	533,552	52.6	4.5
White (non-Hispanic)	811,599	88.4	807,319	86.4	826,106	85.3	841,821	84.9	858,186	84.5	1.9
Men	444,682	89.0	406,173	86.5	405,085	85.1	406,751	84.6	406,656	84.4	0.0
Women	366,917	87.6	401,146	86.2	421,021	85.5	435,069	85.2	451,530	84.6	3.8
Minority	91,777	10.0[c]	104,892	11.2	112,988	11.7	120,139	12.1	130,081	12.8	8.3
Men	44,039	8.8[d]	47,128	10.0	50,972	10.7	54,433	11.3	57,590	12.0	5.8
Women	47,738	11.4[e]	57,764	12.4	62,106	12.6	65,706	12.9	72,491	13.6	10.3
Hispanic	17,964	2.0	21,832	2.3	25,874	2.7	26,990	2.7	29,800	2.9	10.4
Men	10,171	2.0	10,810	2.3	12,402	2.6	12,864	2.7	13,920	2.9	8.2
Women	7,793	1.9	11,022	2.4	13,472	2.7	14,126	2.8	15,880	3.0	12.4
African American (non-Hispanic)	59,122	6.4	60,673	6.5	57,473	5.9	56,555	5.7	58,016	5.7	2.6
Men	25,634	5.1	24,511	5.2	23,018	4.8	22,499	4.7	22,365	4.6	-0.6
Women	33,488	8.0	36,162	7.8	34,455	7.0	34,056	6.7	35,651	6.7	4.7
Asian American[f]	11,193	1.2	18,794	2.0	25,395	2.6	32,618	3.3	38,219	3.8	17.2
Men	6,318	1.3	10,107	2.2	13,554	2.8	17,249	3.6	19,537	4.1	13.3
Women	4,875	1.2	8,687	1.9	11,841	2.4	15,369	3.0	18,682	3.5	21.6
American Indian[g]	3,498	0.4	3,593	0.4	4,246	0.4	3,971	0.4	4,046	0.4	1.9
Men	1,916	0.4	1,700	0.4	1,998	0.4	1,819	0.4	1,768	0.4	-2.8
Women	1,582	0.4	1,893	0.4	2,248	0.5	2,152	0.4	2,278	0.4	5.9
Nonresident Alien	15,012	1.6	22,589	2.4	29,217	3.0	29,306	3.0	26,972	2.7	-8.0
Men	10,881	2.2	16,324	3.5	20,091	4.2	19,598	4.1	17,441	3.6	-11.0
Women	4,131	1.0	6,265	1.3	9,126	1.9	9,708	1.9	9,531	1.8	-1.8

Sources: U.S. Department of Education, Equal Employment Opportunity Commission, *Data on Earned Degrees Conferred from Institutions of Higher Education by Race/Ethnicity 1975-76*.
U.S. Department of Education, National Center for Education Statistics, *Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education: 1978-79 through 1988-89* Washington, D.C. Office of Educational Research and Improvement, January 1991.

[a] Degrees awarded to men as a percentage of all bachelor's degrees awarded that year.

[b] Degrees awarded to women as a percentage of all bachelor's degrees awarded that year.

[c] Degrees awarded to this group as a percentage of all bachelor's degrees awarded that year.

[d] Degrees awarded to men in this group as a percentage of all bachelor's degrees awarded to men that year.

[e] Degrees awarded to women in this group as a percentage of all bachelor's degrees awarded to women that year.

[f] Asian American includes Pacific Islanders.

[g] American Indian includes Alaskan Natives.

Table 11
Master's Degrees by Race/Ethnicity and Sex for Selected Years

	1976		1981		1985		1987		1989		Percent Change
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent	1987-89
Total	309,263	100.0	294,183	100.0	280,421	100.0	289,341	100.0	308,872	100.0	6.8
Men	165,474	53.5[a]	145,666	49.5	139,417	49.7	141,264	48.8	148,486	48.1	5.1
Women	143,789	46.5[b]	148,517	50.5	141,004	50.3	148,077	51.2	160,386	51.9	8.3
White (non-Hispanic)	262,771	85.0	241,216	82.0	223,628	79.7	228,870	79.1	241,607	78.2	5.6
Men	139,507	84.3	115,562	79.3	106,059	76.1	105,573	74.7	109,184	73.5	3.4
Women	123,264	85.7	125,654	84.6	117,569	83.4	123,297	83.3	132,423	82.6	7.4
Minority	30,418	9.8[c]	30,910	10.5	29,841	10.6	30,573	10.6	33,193	10.7	8.6
Men	13,595	8.2[d]	13,517	9.3	13,684	9.8	14,236	10.1	15,307	10.3	7.5
Women	16,823	11.7[e]	17,393	11.7	16,157	11.5	16,337	11.0	17,886	11.2	9.5
Hispanic	5,299	1.7	6,461	2.2	6,864	2.4	7,044	2.4	7,270	2.4	3.2
Men	2,868	1.7	3,085	2.1	3,059	2.2	3,330	2.4	3,360	2.3	0.9
Women	2,431	1.7	3,376	2.3	3,805	2.7	3,714	2.5	3,910	2.4	5.3
African American (non-Hispanic)	20,345	6.6	17,133	5.8	13,939	5.0	13,867	4.8	14,076	4.6	1.5
Men	7,809	4.7	6,158	4.2	5,200	3.7	5,151	3.6	5,200	3.5	1.0
Women	12,536	8.7	10,975	7.4	8,739	6.2	8,716	5.9	8,876	5.5	1.8
Asian American[f]	3,910	1.3	6,282	2.1	7,782	2.8	8,558	3.0	10,714	3.5	25.2
Men	2,409	1.5	3,773	2.6	4,842	3.5	5,238	3.7	6,247	4.2	19.3
Women	1,501	1.0	2,509	1.7	2,940	2.1	3,320	2.2	4,467	2.8	34.5
American Indian[g]	783	0.3	1,034	0.4	1,256	0.4	1,104	0.4	1,133	0.4	2.6
Men	428	0.3	501	0.3	583	0.4	517	0.4	500	0.3	-3.3
Women	355	0.2	533	0.4	673	0.5	587	0.4	633	0.4	7.8
Nonresident Alien	16,074	5.2	22,057	7.5	26,952	9.6	29,898	10.3	34,072	11.0	14.0
Men	12,372	7.5	16,587	11.4	19,674	14.1	21,456	15.2	23,995	16.2	11.8
Women	3,702	2.6	5,470	3.7	7,278	5.2	8,443	5.7	10,077	6.3	19.4

Source: U.S. Department of Education, Equal Employment Opportunity Commission, *Data on Earned Degrees Conferred from Institutions of Higher Education by Race/Ethnicity, 1975-76.* U.S. Department of Education, National Center for Education Statistics, *Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education: 1978-79 through 1988-89.* Washington, D.C.: Office of Educational Research and Improvement, January 1991.

[a] Degrees awarded to men as a percentage of all master's degrees awarded that year.

[b] Degrees awarded to women as a percentage of all master's degrees awarded that year.

[c] Degrees awarded to this group as a percentage of all master's degrees awarded that year.

[d] Degrees awarded to men in this group as a percentage of all master's degrees awarded to men that year.

[e] Degrees awarded to women in this group as a percentage of all master's degrees awarded to women that year.

[f] Asian American includes Pacific Islanders.

[g] American Indian includes Alaskan Natives.

Table 12
First Professional Degrees by Race/Ethnicity and Sex for Selected Years

	1976		1981		1985		1987		1989		Percent Change
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent	1988-90
Total	62,085	100.0	71,340	100.0	71,057	100.0	71,617	100.0	70,758	100.0	-1.2
Men	52,365	84.3[a]	52,194	73.2	47,501	66.8	46,522	65.0	45,067	63.7	3.1
Women	9,720	15.7[b]	19,146	26.8	23,556	33.2	25,095	35.0	25,691	36.3	2.4
White (non-Hispanic)	56,332	90.7	64,551	90.5	63,219	89.0	62,688	87.5	61,188	86.5	-2.4
Men	47,819	91.3	47,629	91.3	42,630	89.7	41,149	88.5	39,448	87.5	-4.1
Women	8,513	87.6	16,922	88.4	20,589	87.4	21,539	85.8	21,740	84.6	0.9
Minority	4,924	7.9[c]	6,120	8.6	6,977	9.8	8,045	11.2	8,590	12.1	6.8
Men	3,847	7.3[d]	4,028	7.7	4,190	8.8	4,741	10.2	4,935	11.0	4.1
Women	1,077	11.1[e]	2,092	10.9	2,787	11.8	3,304	13.2	3,655	14.2	10.6
Hispanic	1,079	1.7	1,541	2.2	1,884	2.7	2,051	2.9	2,254	3.2	9.9
Men	915	1.7	1,131	2.2	1,239	2.6	1,303	2.8	1,367	3.0	4.9
Women	164	1.7	410	2.1	645	2.7	748	3.0	887	3.5	18.6
African American (non-Hispanic)	2,694	4.3	2,931	4.1	3,029	4.3	3,420	4.8	3,101	4.4	-9.3
Men	2,016	3.8	1,772	3.4	1,623	3.4	1,835	3.9	1,608	3.6	-12.4
Women	678	7.0	1,159	6.1	1,406	6.0	1,585	6.3	1,493	5.8	-5.8
Asian American[f]	962	1.5	1,456	2.0	1,816	2.6	2,270	3.2	2,967	4.2	30.7
Men	753	1.4	991	1.9	1,152	2.4	1,420	3.1	1,811	4.0	27.5
Women	209	2.2	465	2.4	664	2.8	850	3.4	1,156	4.5	36.0
American Indian[g]	189	0.3	192	0.3	248	0.3	304	0.4	268	0.4	-11.8
Men	163	0.3	134	0.3	176	0.4	183	0.4	149	0.3	-18.6
Women	26	0.3	58	0.3	72	0.3	121	0.5	119	0.5	-1.7
Nonresident Alien	829	1.3	669	0.9	861	1.2	884	1.2	980	1.4	10.9
Men	699	1.3	537	1.0	681	1.4	632	1.4	684	1.5	8.2
Women	130	1.3	132	0.7	180	0.8	252	1.0	296	1.2	17.5

Sources: U.S. Department of Education, Equal Employment Opportunity Commission, *Data on Earned Degrees Conferred from Institutions of Higher Education by Race/Ethnicity, 1975-76.*
U.S. Department of Education, National Center for Education Statistics, *Race/Ethnicity Trends in Degress Conferred by Institutions of Higher Education: 1978-79 through 1988-89.* Washington, D.C.: Office of Education Research and Improvement, January 1991.

[a] Degrees awarded to men as a percentage of all first professional degrees awarded that year.

[b] Degrees awarded to women as a percentage of all first professional degrees awarded that year.

[c] Degrees awarded to this group as a percentage of all first professional degrees awarded that year.

[d] Degrees awarded to men in this group as a percentage of all first professional degrees awarded to men that year.

[e] Degrees awarded to women in this group as a percentage of all first professional degrees awarded to women that year.

[f] Asian American includes Pacific Islanders.

[g] American Indian includes Alaskan Natives.

Table 13
Bachelor's Degrees for Selected Fields by Race/Ethnicity and Sex, 1976, 1987, and 1989

	TOTAL					MINORITIES				
	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89
EDUCATION										
Total	154,768	87,083	96,988	-37.3	11.4	18,558	8,020	8,190	-55.9	2.1
Men	42,157	20,759	21,662	-48.6	4.3	5,179	2,302	2,172	-58.1	-5.6
Women	112,611	66,324	75,326	-33.1	13.6	13,379	5,718	6,018	-55.0	5.2
BUSINESS										
Total	142,432	241,100	246,659	73.2	2.3	14,211	27,868	30,938	117.7	11.0
Men	114,410	128,920	131,419	14.9	1.9	9,522	12,575	13,562	42.4	7.8
Women	28,022	112,180	115,240	311.2	2.7	4,689	15,293	17,376	270.6	13.6
SOCIAL SCIENCES										
Total	125,820	96,173	107,714	-14.4	12.0	15,911	12,231	14,539	-8.6	18.9
Men	78,070	53,870	59,924	-23.2	11.2	8,764	5,937	6,932	-20.9	16.8
Women	47,750	42,303	47,790	0.1	13.0	7,147	6,294	7,607	6.4	20.9
HEALTH PROFESSIONS										
Total	53,766	63,213	59,111	9.9	-6.5	4,655	7,005	7,337	57.6	4.7
Men	11,396	9,177	8,926	-21.7	-2.7	924	1,119	1,182	27.9	5.6
Women	42,370	54,036	50,185	18.4	-7.1	3,731	5,886	6,155	65.0	4.6
BIOLOGICAL/LIFE SCIENCES										
Total	54,100	38,120	36,079	-33.3	-5.4	4,559	5,959	6,296	38.1	5.7
Men	35,393	19,656	17,970	-49.2	-8.6	2,574	2,820	2,902	12.7	2.9
Women	18,707	18,464	18,109	-3.2	-1.9	1,985	3,139	3,394	71.0	8.1
ENGINEERING[a]										
Total	45,473	93,097	85,273	87.5	-8.4	3,332	12,840	12,992	289.9	1.2
Men	44,015	80,349	73,651	67.3	-8.3	3,184	10,352	10,423	227.4	0.7
Women	1,458	12,748	11,622	697.1	-8.8	148	2,488	2,569	1,635.8	3.3

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Sources: U.S. Department of Education, Equal Employment Opportunity Commission, *Data on Earned Degrees Conferred from Institutions of Higher Education by Race/Ethnicity: 1975-1976.*
U.S. Department of Education,National Center for Education Statistics, *Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education: 1978-79 through 1988-89.* Washington, D.C.: Office of Educational Research and Improvement, January 1991.

Note: Some institutions did not report the racial/ethnic data for earned degrees. Data of some of these nonreporting institutions were imputed. Because of rounding, details may not add to totals.

[a] Engineering includes Engineering Technologies.

[b] Asian American includes Pacific Islanders.

[c] American Indian includes Alaskan Natives.

Table 13 - *Continued*

Bachelor's Degrees for Selected Fields
by Race/Ethnicity and Sex, 1976, 1987, and 1989

	HISPANIC					AFRICAN AMERICAN				
	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89
EDUCATION										
Total	2,831	2,223	2,293	-19.0	3.1	14,209	4,253	4,233	-70.2	-0.5
Men	948	518	580	-38.8	12.0	3,700	1,348	1,149	-68.9	-14.8
Women	1,883	1,705	1,713	-9.0	0.5	10,509	2,905	3,084	-70.7	6.2
BUSINESS										
Total	2,467	6,397	6,987	183.2	9.2	9,489	14,686	15,088	59.0	2.7
Men	1,998	3,251	3,483	74.3	7.1	5,877	6,051	6,051	3.0	0.0
Women	469	3,146	3,504	647.1	11.4	3,612	8,635	9,037	150.2	4.7
SOCIAL SCIENCES										
Total	3,032	2,883	3,618	19.3	25.5	10,978	5,942	6,498	-40.8	9.4
Men	1,953	1,564	1,876	-3.9	19.9	5,713	2,676	2,874	-49.7	7.4
Women	1,079	1,319	1,742	61.4	32.1	5,265	3,266	3,624	-31.2	11.0
HEALTH PROFESSIONS										
Total	901	1,332	1,386	53.8	4.1	2,741	3,822	3,973	44.9	4.0
Men	242	255	265	9.5	3.9	397	481	462	16.4	-4.0
Women	659	1,077	1,121	70.1	4.1	2,344	3,341	3,511	49.8	5.1
BIOLOGICAL/LIFE SCIENCES										
Total	873	1,259	1,254	43.6	-0.4	2,326	1,932	1,944	-16.4	0.6
Men	564	657	655	16.1	-0.3	1,163	740	710	-39.0	-4.1
Women	309	602	599	93.9	-0.5	1,163	1,192	1,234	6.1	3.5
ENGINEERING[a]										
Total	841	2,553	2,458	192.3	-3.7	1,370	3,501	3,237	136.3	-7.5
Men	809	2,178	2,063	155.0	-5.3	1,303	2,580	2,351	80.4	-8.9
Women	32	375	395	1,134.4	5.3	67	921	886	1,222.4	-3.8

Continued on next page

[a] Engineering includes Engineering Technologies.

Table 13 - *Continued*

Bachelor's Degrees for Selected Fields by Race/Ethnicity and Sex, 1976, 1987, and 1989

	WHITE					ASIAN AMERICAN[b]				
	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89
EDUCATION										
Total	135,464	78,216	88,152	-34.9	12.7	776	1,092	1,127	45.2	3.2
Men	36,653	18,050	19,203	-47.6	6.4	292	312	273	-6.5	-12.5
Women	98,811	60,166	68,949	-30.2	14.6	484	780	854	76.4	9.5
BUSINESS										
Total	125,251	205,118	207,824	65.9	1.3	1,829	6,002	8,039	339.5	33.9
Men	102,514	111,091	112,938	10.2	1.7	1,297	2,873	3,669	182.9	27.7
Women	22,737	94,027	94,886	317.3	0.9	532	3,129	4,370	721.4	39.7
SOCIAL SCIENCES										
Total	108,090	81,659	90,929	-15.9	11.4	1,388	2,942	3,992	187.6	35.7
Men	68,013	46,493	51,657	-24.0	11.1	787	1,448	1,962	149.3	35.5
Women	40,077	35,166	39,272	-2.0	11.7	601	1,494	2,030	237.8	35.9
HEALTH PROFESSIONS										
Total	48,462	55,410	51,011	5.3	-7.9	847	1,578	1,733	104.6	9.8
Men	10,196	7,790	7,513	-26.3	-3.6	247	337	407	64.8	20.8
Women	38,266	47,620	43,498	13.7	-8.7	600	1,240	1,326	121.0	6.9
BIOLOGICAL/LIFE SCIENCES										
Total	48,603	31,279	28,896	-40.5	-7.6	1,217	2,620	2,951	142.5	12.6
Men	32,142	16,393	14,634	-54.5	-10.7	757	1,343	1,467	93.8	9.2
Women	16,461	14,886	14,262	-13.4	-4.2	460	1,277	1,484	222.6	16.2
ENGINEERING[a]										
Total	38,970	73,288	66,509	70.7	-9.2	971	6,497	7,012	622.1	7.9
Men	37,729	63,608	57,957	53.6	-8.9	924	5,347	5,770	524.5	7.9
Women	1,241	9,680	8,552	589.1	-11.7	47	1,150	1,242	2,542.6	8.0

Continued on next page

[a] Engineering includes Engineering Technologies.

[b] Asian American includes Pacific Islanders.

Table 13 - *Continued*

Bachelor's Degrees for Selected Fields
by Race/Ethnicity and Sex, 1976, 1987, and 1989

	AMERICAN INDIAN[c]					NONRESIDENT ALIEN				
	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89
EDUCATION										
Total	742	452	537	-27.6	18.8	746	847	646	-13.4	-23.7
Men	239	124	170	-28.9	37.1	325	407	287	-11.7	-29.5
Women	503	328	367	-27.0	11.9	421	440	359	-14.7	-18.4
BUSINESS										
Total	426	783	824	93.4	5.2	2,970	8,114	7,897	165.9	-2.7
Men	350	400	359	2.6	-10.3	2,374	5,254	4,919	107.2	-6.4
Women	76	383	465	511.8	21.4	596	2,860	2,978	399.7	4.1
SOCIAL SCIENCES										
Total	513	464	431	-16.0	-7.1	1,819	2,282	2,246	23.5	-1.6
Men	311	249	220	-29.3	-11.6	1,293	1,440	1,335	3.2	-7.3
Women	202	215	211	4.5	-1.9	526	842	911	73.2	8.2
HEALTH PROFESSIONS										
Total	166	274	245	47.6	-10.6	649	797	763	17.6	-4.3
Men	38	46	48	26.3	4.3	276	268	231	-16.3	-13.8
Women	128	228	197	53.9	-13.6	373	530	532	42.6	0.4
BIOLOGICAL/LIFE SCIENCES										
Total	143	147	147	2.8	0.0	938	883	887	-5.4	0.5
Men	90	79	70	-22.2	-11.4	677	444	434	-35.9	-2.3
Women	53	68	77	45.3	13.2	261	439	453	73.6	3.2
ENGINEERING[a]										
Total	150	289	285	90.0	-1.4	3,171	6,969	5,772	82.0	-17.2
Men	148	247	239	61.5	-3.2	3,102	6,389	5,271	69.9	-17.5
Women	2	42	46	2,200.0	9.5	69	580	501	626.1	-13.6

[a] Engineering includes Engineering Technologies.

[c] American Indian includes Alaskan Natives.

Table 14
Master's for Selected Fields by Race/Ethnicity and Sex, 1976, 1987, and 1989

	TOTAL					MINORITIES				
	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89
EDUCATION										
Total	127,941	75,473	82,238	-35.7	9.0	16,150	8,582	8,879	-45.0	3.5
Men	45,668	19,635	20,286	-55.6	3.3	5,176	2,080	2,095	-59.5	0.7
Women	82,273	55,838	61,952	-24.7	10.9	10,974	6,502	6,784	-38.2	4.3
BUSINESS										
Total	42,189	67,504	73,154	73.4	8.4	2,849	6,721	7,817	174.4	16.3
Men	37,242	45,219	48,557	30.4	7.4	2,338	4,234	4,739	102.7	11.9
Women	4,947	22,285	24,597	397.2	10.4	511	2,487	3,078	502.3	23.8
SOCIAL SCIENCES										
Total	15,767	10,395	10,854	-31.2	4.4	1,406	934	1,026	-27.0	9.9
Men	10,753	6,293	6,493	-39.6	3.2	847	549	571	-32.6	4.0
Women	5,014	4,102	4,361	-13.0	6.3	559	385	455	-18.6	18.2
HEALTH PROFESSIONS										
Total	12,422	18,421	19,255	55.0	4.5	1,049	1,785	1,900	81.1	6.4
Men	4,186	3,885	4,210	0.6	8.4	346	375	470	35.8	25.3
Women	8,236	14,536	15,045	82.7	3.5	703	1,410	1,430	103.4	1.4
PUBLIC AFFAIRS										
Total	16,924	18,523	19,434	14.8	4.9	2,306	2,827	2,948	27.8	4.3
Men	9,324	7,120	7,333	-21.4	3.0	1,044	1,097	1,072	2.7	-2.3
Women	7,600	11,403	12,101	59.2	6.1	1,262	1,730	1,876	48.7	8.4
ENGINEERING[a]										
Total	15,907	22,658	24,541	54.3	8.3	1,001	2,799	3,089	208.6	10.4
Men	15,332	19,808	21,355	39.3	7.8	939	2,417	2,590	175.8	7.2
Women	575	2,850	3,186	454.1	11.8	62	382	499	704.8	30.6

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Sources: U.S. Department of Education, Equal Employment Opportunity Commission, *Data on Earned Degrees Conferred from Institutions of Higher Education by Race/Ethnicity 1975-76*.
U.S. Department of Education, National Center for Education Statistics, *Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education: 1978-79 through 1988-89*. Washington, D.C.: Office of Educational Reserach and Improvement, January 1991.

Note: Some institutions did not report the racial/ethnic data for earned degrees. Data of some of these nonreporting institutions were imputed. Because of rounding details may not add to totals.

[a] Engineering includes Engineering Technologies.

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Table 14 - *Continued*

Master's for Selected Fields

by Race/Ethnicity and Sex, 1976, 1987, and 1989

	HISPANIC					AFRICAN AMERICAN				
	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89
EDUCATION										
Total	2,421	2,232	2,157	-10.9	-3.4	12,434	5,250	5,272	-57.6	0.4
Men	1,002	601	591	-41.0	-1.7	3,665	1,127	1,105	-69.8	-2.0
Women	1,419	1,631	1,566	10.4	-4.0	8,769	4,123	4,167	-52.5	1.1
BUSINESS										
Total	502	1,437	1,581	214.9	10.0	1,549	2,810	3,077	98.6	9.5
Men	444	954	982	121.2	2.9	1,231	1,637	1,746	41.8	6.7
Women	58	483	599	932.8	24.0	318	1,173	1,331	318.6	13.5
SOCIAL SCIENCES										
Total	285	245	247	-13.3	0.8	883	416	397	-55.0	-4.6
Men	200	154	148	-26.0	-3.9	489	226	200	-59.1	-11.5
Women	85	91	99	16.5	8.8	394	190	197	-50.0	3.7
HEALTH PROFESSIONS										
Total	175	378	398	127.4	5.3	622	856	854	37.3	-0.2
Men	74	72	102	37.8	41.7	169	139	179	5.9	28.8
Women	101	306	296	193.1	-3.3	453	717	675	49.0	-5.9
PUBLIC AFFAIRS										
Total	437	628	614	40.5	-2.2	1,615	1,718	1,788	10.7	4.1
Men	241	275	250	3.7	-9.1	660	604	602	-8.8	-0.3
Women	196	353	364	85.7	3.1	955	1,114	1,186	24.2	6.5
ENGINEERING[a]										
Total	228	529	482	111.4	-8.9	233	449	424	82.0	-5.6
Men	220	460	404	83.6	-12.2	210	351	315	50.0	-10.3
Women	8	73	78	875.0	6.8	23	98	109	373.9	11.2

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[a] Engineering includes Engineering Technologies.

Table 14 - *Continued*

Master's for Selected Fields

by Race/Ethnicity and Sex, 1976, 1987, and 1989

	WHITE					ASIAN AMERICAN [b]				
	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89
EDUCATION										
Total	109,465	64,492	70,827	-35.3	9.8	905	724	1,064	17.6	47.0
Men	39,251	16,431	17,046	-56.6	3.7	340	232	278	-18.2	19.8
Women	70,214	48,061	53,781	-23.4	11.9	565	492	786	39.1	59.8
BUSINESS										
Total	36,200	53,582	57,445	58.7	7.2	727	2,304	2,962	307.4	28.6
Men	32,136	35,505	38,013	18.3	7.1	599	1,531	1,886	214.9	23.2
Women	4,064	18,077	19,432	378.1	7.5	128	773	1,076	740.6	39.2
SOCIAL SCIENCES										
Total	13,068	7,441	7,678	-41.2	3.2	200	250	329	64.5	31.6
Men	8,906	4,316	4,457	-50.0	3.3	134	152	192	43.3	26.3
Women	4,162	3,125	3,221	-22.6	3.1	66	98	137	107.6	39.8
HEALTH PROFESSIONS										
Total	10,833	15,724	16,235	49.9	3.2	215	489	563	161.9	15.1
Men	3,536	3,048	3,203	-9.4	5.1	86	152	168	95.3	10.5
Women	7,297	12,676	13,032	78.6	2.8	129	337	395	206.2	17.2
PUBLIC AFFAIRS										
Total	14,145	14,867	15,539	9.9	4.5	194	337	444	128.9	31.8
Men	7,959	5,465	5,602	-29.6	2.5	109	158	186	70.6	17.7
Women	6,186	9,402	9,937	60.6	5.7	85	179	258	203.5	44.1
ENGINEERING[a]										
Total	11,414	13,748	14,206	24.5	3.3	500	1,757	2,146	329.2	22.1
Men	11,001	11,742	12,086	9.9	2.9	469	1,552	1,839	292.1	18.5
Women	413	2,006	2,120	413.3	5.7	31	205	307	890.3	49.8

Continued on next page

[a] Engineering includes Engineering Technologies.

[b] Asian American includes Pacific Islanders

Table 14 - *Continued*

Master's for Selected Fields

by Race/Ethnicity and Sex, 1976, 1987, and 1989

	AMERICAN INDIAN [c]					NONRESIDENT ALIEN				
	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89	1976 Total	1987 Total	1989 Total	Percent Change 1976-89	Percent Change 1987-89
EDUCATION										
Total	390	376	386	-1.0	2.7	2,326	2,399	2,532	8.9	5.5
Men	169	120	121	-28.4	0.8	1,241	1,124	1,145	-7.7	1.9
Women	221	256	265	19.9	3.5	1,085	1,275	1,387	27.8	8.8
BUSINESS										
Total	71	170	197	177.5	15.9	3,140	7,201	7,892	151.3	9.6
Men	64	112	125	95.3	11.6	2,768	5,480	5,805	109.7	5.9
Women	7	58	72	928.6	24.1	372	1,721	2,087	461.0	21.3
SOCIAL SCIENCES										
Total	38	23	53	39.5	130.4	1,293	2,020	2,150	66.3	6.4
Men	24	17	31	29.2	82.4	1,000	1,428	1,465	46.5	2.6
Women	14	6	22	57.1	266.7	293	592	685	133.8	15.7
HEALTH PROFESSIONS										
Total	37	62	85	129.7	37.1	540	912	1,120	107.4	22.8
Men	17	12	21	23.5	75.0	304	462	537	76.6	16.2
Women	20	50	64	220.0	28.0	236	450	583	147.0	29.6
PUBLIC AFFAIRS										
Total	60	144	102	70.0	-29.2	473	829	947	100.2	14.2
Men	34	60	34	0.0	-43.3	321	558	659	105.3	18.1
Women	26	84	68	161.5	-19.0	152	271	288	89.5	6.3
ENGINEERING[a]										
Total	40	97	37	-7.5	-61.9	3,492	6,111	7,246	107.5	18.6
Men	40	58	32	-20.0	-44.8	3,392	5,649	6,679	96.9	18.2
Women	0	6	5	N/A	-16.7	100	462	567	467.0	22.7

[a] Engineering includes Engineering Technologies.

[c] American Indian includes Alaskan Natives.

Table 15
Doctorate Degrees by U.S. Citizenship by Race/Ethnicity and Sex, 1980 to 1990

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	Percent Change 1989-90
TOTAL DOCTORATES[a]	31,020	31,357	31,106	31,280	31,332	31,291	31,896	32,367	33,456	34,319	36,027	5.0
Men	21,613	21,465	21,013	20,747	20,633	20,547	20,590	20,941	21,666	21,793	22,949	5.3
Women	9,407	9,892	10,093	10,533	10,699	10,744	11,306	11,426	11,790	12,526	13,098	4.6
U.S. CITIZENS[b]												
All U.S. Citizens	25,221	25,061	24,388	24,358	24,026	23,363	23,081	22,991	23,172	23,172	24,190	4.4
Men	16,875	16,360	15,559	15,119	14,729	14,217	13,633	13,581	13,667	13,278	13,764	3.7
Women	8,346	8,701	8,829	9,239	9,297	9,146	9,448	9,410	9,505	9,894	10,426	5.4
White	21,993	21,980	21,677	21,699	21,349	20,757	20,626	20,470	20,685	20,688	21,650	4.7
Men	14,848	14,459	13,987	13,609	13,170	12,805	12,303	12,172	12,296	11,896	12,384	4.1
Women	7,145	7,521	7,690	8,090	8,179	7,952	8,323	8,298	8,389	8,792	9,266	5.4
African American	1,032	1,013	1,047	922	953	912	823	767	805	811	828	2.1
Men	499	499	483	413	427	379	322	317	311	323	320	-0.9
Women	533	514	564	509	526	533	501	450	494	488	508	4.1
Hispanic	412	464	535	539	536	561	572	619	594	570	700	22.8
Men	256	275	344	288	314	300	303	333	321	307	373	21.5
Women	156	189	191	251	222	261	269	286	273	263	327	24.3
Asian American	458	465	452	492	512	516	531	542	612	624	617	-1.1
Men	313	315	281	312	338	329	348	369	413	440	411	-6.6
Women	145	150	171	180	174	187	183	173	199	184	206	12.0
American Indian[c]	75	85	77	81	74	95	99	115	93	93	94	1.1
Men	46	56	44	50	54	39	58	62	51	48	49	2.1
Women	29	29	33	31	20	56	41	53	42	45	45	0.0
NON-U.S. CITIZENS[b]	4,935	5,221	5,432	5,774	6,054	6,553	6,707	7,187	7,787	8,195	9,398	14.7
Men	4,126	4,360	4,536	4,825	5,024	5,394	5,481	5,839	6,278	6,524	7,493	14.9
Women	809	861	896	949	1,030	1,159	1,226	1,348	1,509	1,671	1,905	14.0

Source: National Research Council, Doctorate Records File, various years.

[a] Includes doctorates with unknown citizenship status and unknown race/ethnicity.

[b] Includes doctorates with unknown race/ethnicity.

[c] American Indian includes Alaskan Natives.

Table 16
Doctorate Degrees by Field, U.S. Citizenship and Race/Ethnicity and Sex, 1980, 1989, and 1990

	TOTAL				PHYSICAL SCIENCES				ENGINEERING			
	1980	1989	1990	Percent Change 1989-90	1980	1989	1990	Percent Change 1989-90	1980	1989	1990	Percent Change 1989-90
Total Doctorates [a]	31,020	34,319	36,027	5.0	4,111	5,457	5,872	7.6	2,479	4,530	4,900	8.2
American Indian [c]	75	93	94	1.1	5	18	5	-72.2	3	7	4	-42.9
Asian	2,621	5,150	6,080	18.1	605	1,262	1,563	23.9	740	1,612	1,800	11.7
Black	1,445	1,229	1,255	2.1	50	68	53	-22.1	57	57	74	29.8
Hispanic	821	1,041	1,192	14.5	91	150	166	10.7	77	116	124	6.9
White	23,805	23,112	24,246	4.9	3,013	3,374	3,516	4.2	1,428	2,196	2,352	7.1
U.S. Citizens [b]	25,221	23,172	24,190	4.4	3,072	3,221	3,314	2.9	1,255	1,854	1,935	4.4
American Indian [c]	75	93	94	1.1	5	18	5	-72.2	3	7	4	-42.9
Asian American [d]	458	624	617	-1.1	75	117	108	-7.7	73	172	152	-11.6
African American	1,032	811	828	2.1	25	35	23	-34.3	11	23	28	21.7
Hispanic	412	570	700	22.8	27	70	83	18.6	18	33	39	18.2
White	21,993	20,688	21,650	4.7	2,715	2,896	3,009	3.9	1,068	1,572	1,667	6.0
Permanent Visas [b]	1,291	1,605	1,654	3.1	252	268	289	7.8	299	361	375	3.9
American Indian [c]	0	0	0	N/A	0	0	0	N/A	0	0	0	N/A
Asian	644	631	643	1.9	162	136	141	3.7	205	186	193	3.8
Black	74	135	144	6.7	4	9	11	22.2	7	9	12	33.3
Hispanic	73	111	114	2.7	10	13	15	15.4	9	14	14	0.0
White	486	666	695	4.4	70	106	114	7.5	75	140	149	6.4
Temporary Visas [b]	3,644	6,590	7,744	17.5	688	1,529	1,866	22.0	851	1,924	2,192	13.9
American Indian [c]	0	0	0	N/A	0	0	0	N/A	0	0	0	N/A
Asian	1,472	3,877	4,788	23.5	360	1,000	1,312	31.2	448	1,252	1,446	15.5
Black	331	272	277	1.8	20	24	19	-20.8	39	23	33	43.5
Hispanic	328	355	373	5.1	51	66	66	0.0	49	69	71	2.9
White	1,331	1,725	1,878	8.9	227	376	389	3.5	284	485	537	10.7

	LIFE SCIENCES				SOCIAL SCIENCES				HUMANITIES			
Total Doctorates [a]	5,461	6,349	6,629	4.4	5,856	5,972	6,089	2.0	3,871	3,569	3,819	7.0
American Indian [c]	7	12	8	-33.3	13	18	23	27.8	3	7	8	14.3
Asian	482	839	1,125	34.1	320	556	596	7.2	132	206	213	3.4
Black	161	177	166	-6.2	249	247	269	8.9	127	95	87	-8.4
Hispanic	173	222	241	8.6	150	196	234	19.4	118	131	177	35.1
White	4,258	4,484	4,558	1.7	4,691	4,091	4,364	6.7	3,191	2,750	3,031	10.2
U.S. Citizens [b]	4,415	4,519	4,499	-0.4	4,992	4,194	4,475	6.7	3,394	2,711	3,000	10.7
American Indian [c]	7	12	8	-33.3	13	18	23	27.8	3	7	8	14.3
Asian American [d]	102	138	149	8.0	79	71	82	15.5	40	40	34	-15.0
African American	65	75	63	-16.0	180	163	172	5.5	97	72	70	-2.8
Hispanic	36	84	103	22.6	93	124	165	33.1	79	83	108	30.1
White	3,958	4,117	4,114	-0.1	4,402	3,765	4,005	6.4	3,020	2,462	2,728	10.8
Permanent Visas [b]	229	257	280	8.9	196	221	235	6.3	136	209	192	-8.1
American Indian [c]	0	0	0	N/A	0	0	0	N/A	0	0	0	N/A
Asian	128	108	113	4.6	66	64	57	-10.9	30	44	41	-6.8
Black	10	24	28	16.7	22	25	32	28.0	7	9	3	-66.7
Hispanic	8	21	25	19.0	12	20	21	5.0	24	25	24	-4.0
White	77	90	101	12.2	88	102	116	13.7	70	123	117	-4.9
Temporary Visas [b]	714	1,140	1,464	28.4	484	811	860	6.0	206	343	387	12.8
American Indian [c]	0	0	0	N/A	0	0	0	N/A	0	0	0	N/A
Asian	246	589	852	44.7	167	423	455	7.6	59	120	134	11.7
Black	85	75	72	-4.0	44	55	64	16.4	23	13	13	0.0
Hispanic	129	116	112	-3.4	43	51	48	-5.9	14	23	43	87.0
White	219	283	329	16.3	198	231	239	3.5	100	169	167	-1.2

Continued on next page

Source: National Research Council, Doctorate Records File, various years.

[a] Includes doctorates with unknown citizenship status and unknown race/ethnicity.

[b] Includes doctorates with unknown race/ethnicity.

[c] American Indian includes Alaskan Natives.

[d] Asian American includes Pacific Islanders.

Table 16 - *Continued*

Doctorate Degrees by Field, U.S. Citizenship and Race/Ethnicity and Sex, 1980, 1989, and 1990

	EDUCATION				PROFESSIONAL, OTHER			
	1980	1989	1990	Percent Change 1989-90	1980	1989	1990	Percent Change 1989-90
Total Doctorates[a]	7,586	6,280	6,485	3.3	1,656	2,196	2,270	3.4
American Indian[c]	43	24	37	54.2	1	7	9	28.6
Asian	242	330	353	7.0	100	340	426	25.3
Black	701	487	513	5.3	100	98	94	-4.1
Hispanic	183	188	201	6.9	29	38	49	28.9
White	5,919	4,692	4,922	4.9	1,305	1,479	1,503	1.6
U.S. Citizens[b]	6,749	5,191	5,467	5.3	1,344	1,483	1,500	1.1
American Indian[c]	43	24	37	54.2	1	7	9	28.6
Asian American[d]	65	55	61	10.9	24	31	31	0.0
Black	591	389	420	8.0	63	54	52	-3.7
Hispanic	144	151	172	13.9	15	25	30	20.0
White	5,652	4,531	4,741	4.6	1,178	1,345	1,364	1.4
Permanent Visas[b]	112	162	151	-6.8	67	127	131	3.1
American Indian[c]	0	0	0	N/A	0	0	0	N/A
Asian	28	45	37	-17.8	25	48	61	29.2
Black	16	41	39	-4.9	8	18	19	5.6
Hispanic	8	13	10	-23.1	2	5	5	0.0
White	58	58	58	0.0	30	47	40	-14.9
Temporary Visas[b]	507	442	480	8.6	192	395	496	25.6
American Indian[c]	0	0	0	N/A	0	0	0	N/A
Asian	145	225	249	10.7	47	260	335	28.8
Black	91	56	53	-5.4	29	26	23	-11.5
Hispanic	30	22	19	-13.6	12	8	14	75.0
White	206	102	126	23.5	97	79	94	19.0

[a] Includes doctorates with unknown citizenship status and unknown race/ethnicity.

[b] Includes doctorates with unknown race/ethnicity.

[c] American Indian inlcudes Alaskan Natives.

[d] Asian American includes Pacific Islanders.

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Table 17
Degrees Conferred by Historically Black Colleges and Universities in Selected Fields, 1982, 1987, and 1989[a]

	BACHELOR'S				MASTER'S				DOCTORATE			
	1982	1987	1989	Percent Change 1987-89	1982	1987	1989	Percent Change 1987-89	1982	1987	1989	Percent Change 1987-89
Business and Management	5,692	5,737	5,327	-7.1	577	586	410	-30.0	0	0	0	N/A
Education	3,852	2,421	2,125	-12.2	2,456	1,935	1,840	-4.9	22	91	72	-20.9
Social Sciences	2,433	1,666	1,622	-2.6	133	107	98	-8.4	19	26	24	-7.7
Engineering	1,646	1,553	1,161	-25.2	73	110	105	-4.5	1	0	2	N/A
Public Affairs	1,470	1,269	1,320	4.0	419	406	468	15.3	12	9	4	-55.6
Health Sciences	847	885	783	-11.5	60	95	96	1.1	0	0	1	N/A

Sources: Susan T. Hill, *The Traditionally Black Institutions of Higher Education 1986-1962*, Washington, D.C. National Center for Education Statistics. "Degrees Conferred" surveys, 1985, 1987, and 1989. Tabulations done by the American Council on Education, Division of Policy Analysis and Research.

[a] 1987 and 1989 data show degrees granted from a total of 97 HBCUs compared to 100 in 1985. Three institutions were not included because they either had closed, had merged with another institution, or were no longer accredited by an agency recognized by the U.S. Department of Education.

Table 18
Full-Time Employment in Higher Education by Race/Ethnicity and Sex, 1979, 1983, 1985, and 1989

	1979 Total	Percent	1983 Total	Percent	1985 Total	Percent	1989 Total	Percent	Percent Change 1979-89
Total	1,473,499	100.0	1,588,151	100.0	1,577,087	100.0	1,779,528	100.0	20.8
Men	766,741	52.0	815,417	51.3	795,708	50.5	865,332	48.6	12.9
Women	706,758	48.0	772,770	48.7	781,379	49.5	914,196	51.4	29.4
White (non-Hispanic)	1,212,382	82.3	1,297,929	81.7	1,279,316	81.1	1,418,104	79.7	17.0
Men	650,394	44.1	686,313	43.2	664,143	42.1	708,302	39.8	8.9
Women	561,988	38.1	611,616	38.5	615,173	39.0	709,802	39.9	26.3
Total Minority	261,117	17.7	290,258	18.3	297,771	18.9	361,424	20.3	38.4
Men	116,347	7.9	129,104	8.1	131,565	8.3	157,030	8.8	35.0
Women	144,770	9.8	161,154	10.1	166,206	10.5	204,394	11.5	41.2
African American (non-Hispanic)	181,256	12.3	193,047	12.2	192,446	12.2	220,277	12.4	21.5
Men	72,344	4.9	75,874	4.8	74,207	4.7	83,090	4.7	14.9
Women	108,912	7.4	117,173	7.4	118,239	7.5	137,187	7.7	26.0
Hispanic	41,125	2.8	48,926	3.1	52,708	3.3	69,238	3.9	68.4
Men	21,895	1.5	25,120	1.6	26,749	1.7	33,817	1.9	54.5
Women	19,230	1.3	23,806	1.5	25,959	1.6	35,421	2.0	84.2
Asian American[a]	33,583	2.3	41,550	2.6	45,469	2.9	64,060	3.6	90.8
Men	19,455	1.3	24,159	1.5	26,613	1.7	36,410	2.0	87.1
Women	14,128	1.0	17,391	1.1	18,856	1.2	27,650	1.6	95.7
American Indian[b]	5,153	0.3	6,735	0.4	7,148	0.5	7,849	0.4	52.3
Men	2,653	0.2	3,951	0.2	3,996	0.3	3,713	0.2	40.0
Women	2,500	0.2	2,784	0.2	3,152	0.2	4,136	0.2	65.4

Source: U.S. Equal Employment Opportunity Commission, "EEO-6 Higher Education Staff Information" surveys, 1979, 1983, 1985, and 1989.

Note: Details may not add to total because of rounding. Employment counts are based on the following number of higher education institutions each year: 2,879 in 1979; 3,011 in 1983; 2,868 in 1985; and 3,452 in 1989. Data are based on reported counts and are not imputed for nonreporting institutions.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

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Table 19
Full-Time Faculty in Higher Education by Race/Ethnicity and Sex, 1979, 1983, 1985, and 1989

	1979 Total	Percent	1983 Total	Percent	1985 Total	Percent	1989 Total	Percent	Percent Change 1979-89
Total	451,348	100.0	485,739	100.0	473,537	100.0	514,662	100.0	14.0
Men	335,295	74.3	356,579	73.4	342,916	72.4	358,562	69.7	6.9
Women	116,053	25.7	129,160	26.6	130,621	27.6	156,100	30.3	34.5
White (non-Hispanic)	410,933	91.0	440,505	90.7	426,468	90.1	455,600	88.5	10.9
Men	308,464	68.3	326,171	67.1	311,018	65.7	319,330	62.0	3.5
Women	102,469	22.7	114,334	23.5	115,450	24.4	136,270	26.5	33.0
Total Minority	40,415	9.0	45,234	9.3	47,069	9.9	58,935	11.5	45.8
Men	26,831	5.9	30,408	6.3	31,898	6.7	39,232	7.6	46.2
Women	13,584	3.0	14,826	3.1	15,171	3.2	19,703	3.8	45.0
African American (non-Hispanic)	19,494	4.3	19,571	4.0	19,559	4.1	23,225	4.5	19.1
Men	10,577	2.3	10,541	2.2	10,631	2.2	12,483	2.4	18.0
Women	8,917	2.0	9,030	1.9	8,928	1.9	10,742	2.1	20.5
Hispanic	6,779	1.5	7,456	1.5	7,788	1.6	10,087	2.0	48.8
Men	4,871	1.1	5,240	1.1	5,458	1.2	6,757	1.3	38.7
Women	1,908	0.4	2,216	0.5	2,330	0.5	3,330	0.6	74.5
Asian American[a]	13,086	2.9	16,899	3.5	18,245	3.9	24,125	4.7	84.4
Men	10,629	2.4	13,677	2.8	14,682	3.1	19,006	3.7	78.8
Women	2,457	0.5	3,222	0.7	3,563	0.8	5,119	1.0	108.3
American Indian[b]	1,056	0.2	1,308	0.3	1,477	0.3	1,498	0.3	41.9
Men	754	0.2	950	0.2	1,127	0.2	986	0.2	30.8
Women	302	0.1	358	0.1	350	0.1	512	0.1	69.5

Source: U.S. Equal Employment Opportunity Commission, "EEO-6 Higher Education Staff Information" surveys, 1979, 1983, 1985, and 1989.

Note: Details may not add to total because of rounding. Includes full-time faculty who are in nontenured earning positions, tenured faculty, and faculty who are nontenured, but in positions that lead to consideration for tenure. Employment counts are based on the following number of higher education institutions each year: 2,879 in 1979; 3,011 in 1983; 2,868 in 1985; and 3,452 in 1989. Data are based on reported counts and are not imputed for nonreporting institutions.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

Table 20
Full-Time Faculty Tenure Rates by Race/Ethnicity and Sex, 1979, 1983, 1985, and 1989

	1979 Total	Rates	1983 Total	Rates	1985 Total	Rates	1989 Total	Rates
Total	242,642	68.1	258,136	70.6	252,778	71.2	261,804	70.7
Men	196,174	71.9	206,244	74.3	201,020	74.9	204,037	74.9
Women	46,468	55.7	51,892	58.9	51,758	59.5	57,767	59.2
White (non-Hispanic)	224,421	68.9	237,501	71.3	231,028	72.1	237,713	71.9
Men	183,129	72.6	191,439	75.1	185,314	76.0	186,807	76.2
Women	41,292	56.0	46,062	59.0	45,714	59.8	50,906	59.5
Total Minority	18,221	60.3	20,635	62.8	21,750	62.5	24,091	60.7
Men	13,045	63.6	14,805	64.9	15,706	64.5	17,230	62.9
Women	5,176	53.6	5,830	58.2	6,044	57.8	6,861	57.2
African American (non-Hispanic)	8,310	58.4	8,746	62.7	9,009	61.7	9,230	61.0
Men	4,916	61.8	5,119	65.4	5,335	64.9	5,375	62.9
Women	3,394	54.1	3,627	59.2	3,674	57.5	3,855	58.6
Hispanic	3,387	62.1	3,814	66.7	3,898	67.2	4,472	63.9
Men	2,532	64.8	2,831	69.3	2,859	69.3	3,200	66.3
Women	855	56.3	983	60.3	1,039	62.1	1,272	58.4
Asian American[a]	6,002	61.9	7,454	60.7	8,014	61.1	9,771	59.8
Men	5,175	64.5	6,362	62.2	6,810	62.3	8,184	61.2
Women	827	49.1	1,092	53.2	1,204	55.2	1,587	53.5
American Indian[b]	522	63.2	621	70.7	829	64.8	618	66.6
Men	422	66.4	493	73.1	702	65.5	471	70.5
Women	100	52.6	128	62.7	127	61.1	147	56.5

Source: U.S. Equal Employment Opportunity Commission, "EEO-6 Higher Education Staff Information" surveys, 1979, 1983, 1985, and 1989.

Note: Details may not add to total because of rounding. Tenure rates are based on the number of full-time faculty on "tenure track," and therefore exclude faculty who are in nontenure-earning positions. Employment counts are based on the following number of higher education institutions each year: 2,879 in 1979, 3,011 in 1983, 2,868 in 1985, and 3,452 in 1989. Data are based on reported counts and are not imputed for nonreporting institutions.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

Table 21
Full-Time Faculty by Academic Rank, Race/Ethnicity and Sex, 1979, 1983, 1985, and 1989

	FULL PROFESSOR							
	MEN				WOMEN			
	1979	1983	1985	1989	1979	1983	1985	1989
Total	98,870	114,072	114,258	122,965	10,616	14,070	15,011	19,411
Participation Rate (%)	90.3	89.0	88.4	86.4	9.7	11.0	11.6	13.6
White (non-Hispanic)	93,185	106,554	106,335	113,345	9,658	12,665	13,533	17,460
Participation Rate (%)	85.1	83.2	82.3	79.6	8.8	9.9	10.5	12.3
Total Minority	5,685	7,518	7,923	9,620	958	1,405	1,478	1,951
Participation Rate (%)	5.2	5.9	6.1	6.8	0.9	1.1	1.1	1.4
African American (non-Hispanic)	1,664	2,034	2,058	2,350	603	823	801	998
Participation Rate (%)	1.5	1.6	1.6	1.7	0.6	0.6	0.6	0.7
Hispanic	838	1,137	1,206	1,538	140	232	249	349
Participation Rate (%)	0.8	0.9	0.9	1.1	0.1	0.2	0.2	0.2
Asian American[a]	2,986	4,151	4,395	5,495	195	315	393	556
Participation Rate (%)	2.7	3.2	3.4	3.9	0.2	0.2	0.3	0.4
American Indian[b]	197	196	264	237	20	35	35	48
Participation Rate (%)	0.2	0.2	0.2	0.2	[c]	[c]	[c]	[c]

	ASSOCIATE PROFESSOR							
	MEN				WOMEN			
	1979	1983	1985	1989	1979	1983	1985	1989
Total	85,167	87,176	85,156	84,284	20,326	24,711	25,936	30,135
Participation Rate (%)	80.7	77.9	76.7	73.7	19.3	22.1	23.3	26.3
White (non-Hispanic)	79,080	80,100	77,483	75,814	18,327	22,146	23,147	26,756
Participation Rate (%)	75.0	71.6	69.7	66.3	17.4	19.8	20.8	23.4
Total Minority	6,087	7,076	7,673	8,470	1,999	2,565	2,789	3,379
Participation Rate (%)	5.8	6.3	6.9	7.4	1.9	2.3	2.5	3.0
African American (non-Hispanic)	2,243	2,461	2,595	2,817	1,210	1,508	1,606	1,852
Participation Rate (%)	2.1	2.2	2.3	2.5	1.1	1.3	1.4	1.6
Hispanic	1,107	1,210	1,280	1,402	322	394	447	544
Participation Rate (%)	1.0	1.1	1.2	1.2	0.3	0.4	0.4	0.5
Asian American[a]	2,581	3,176	3,451	4,056	433	608	679	914
Participation Rate (%)	2.4	2.8	3.1	3.5	0.4	0.5	0.6	0.8
American Indian[b]	156	229	347	195	34	55	57	69
Participation Rate (%)	0.1	0.2	0.3	0.2	[c]	[c]	0.1	0.1

Continued on next page

Source: U.S. Equal Employment Opportunity Commission, "EEO-6 Higher Education Staff Information" surveys, 1979, 1983, 1985, and 1989.

Note: Details may not add to total because of rounding. Because of reporting differences in 1989 faculty rank data, these figures do not include 52 institutions that are included in other 1989 EEOC figures. Employment counts are based on the following number of higher education institutions each year: 2,879 in 1979; 3,011 in 1983; 2,868 in 1985; and 3,452 in 1989. Data are based on reported counts and are not imputed for nonreporting institutions.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

[c] Less than 0.05 percent.

Table 21 - *Continued*

Full-Time Faculty by Academic Rank, Race/Ethnicity and Sex, 1979, 1983, 1985, and 1989

ASSISTANT PROFESSOR

	MEN				WOMEN			
	1979	1983	1985	1989	1979	1983	1985	1989
Total	77,362	74,166	71,463	74,057	36,432	39,164	39,845	45,976
Participation Rate (%)	68.0	65.4	64.2	61.7	32.0	34.6	35.8	38.3
White (non-Hispanic)	69,989	65,692	62,582	63,043	32,245	34,484	34,914	39,865
Participation Rate (%)	61.5	58.0	56.2	52.5	28.3	30.4	31.4	33.2
Total Minority	7,373	8,474	8,881	11,014	4,187	4,680	4,931	6,111
Participation Rate (%)	6.5	7.5	8.0	9.2	3.7	4.1	4.4	5.1
African American (non-Hispanic)	3,043	2,964	2,923	3,414	2,710	2,883	2,972	3,254
Participation Rate (%)	2.7	2.6	2.6	2.8	2.4	2.5	2.7	2.7
Hispanic	1,285	1,389	1,316	1,687	569	619	652	988
Participation Rate (%)	1.1	1.2	1.2	1.4	0.5	0.5	0.6	0.8
Asian American[a]	2,841	3,905	4,240	5,727	819	1,097	1,229	1,749
Participation Rate (%)	2.5	3.4	3.8	4.8	0.7	1.0	1.1	1.5
American Indian[b]	204	216	402	186	89	81	78	120
Participation Rate (%)	0.2	0.2	0.4	0.2	0.1	0.1	0.1	0.1

INSTRUCTOR, LECTURER, AND OTHER FACULTY

	MEN				WOMEN			
	1979	1983	1985	1989	1979	1983	1985	1989
Total	65,837	68,366	65,132	70,136	45,405	48,948	47,271	56,615
Participation Rate (%)	59.2	58.3	57.9	55.3	40.8	41.7	42.1	44.7
White (non-Hispanic)	58,836	61,078	57,553	61,019	39,500	42,972	41,489	48,809
Participation Rate (%)	52.9	52.1	51.2	48.1	35.5	33.6	36.9	38.5
Total Minority	7,001	7,288	7,579	8,510	5,905	5,976	5,782	8,413
Participation Rate (%)	6.0	6.2	6.7	6.7	5.3	5.1	5.1	6.6
African American (non-Hispanic)	3,144	3,081	2,880	3,472	3,913	3,697	3,392	4,246
Participation Rate (%)	2.8	2.6	2.6	2.7	3.5	3.2	3.0	3.3
Hispanic	1,621	1,436	1,558	1,414	932	939	996	2,021
Participation Rate (%)	1.5	1.2	1.4	1.1	0.8	0.8	0.9	1.6
Asian American[a]	1,926	2,460	2,760	3,276	922	1,156	1,223	1,885
Participation Rate (%)	1.7	2.1	2.5	2.6	0.8	1	1.1	1.5
American Indian[b]	310	311	381	348	138	184	171	261
Participation Rate (%)	0.3	0	0.3	0.3	0.1	0.2	0.2	0.2

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

Table 22
Current Faculty Appointments by Department, Race/Ethnicity and Sex, 1989-90

	WHITE			MINORITY			AFRICAN AMERICAN			HISPANIC			ASIAN AMERICAN[b]		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
All Departments	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture or Forestry	2.0	0.5	1.6	2.0	0.7	1.5	3.7	0.7	2.2	0.6	[a]	0.4	0.9	0.9	0.9
Biological Sciences	6.5	3.6	5.7	6.1	3.0	5.0	6.2	2.1	4.2	1.9	4.7	3.0	7.4	4.1	6.8
Business	8.7	8.3	8.6	10.2	6.4	8.9	11.9	7.5	9.8	4.5	5.6	4.9	11.4	4.4	10.1
Education	6.6	13.3	8.5	6.7	15.4	9.8	11.1	19.5	15.2	11.3	10.3	10.9	1.6	9.7	3.2
Engineering	6.2	0.7	4.7	9.0	0.4	6.0	2.7	0.1	1.4	1.3	1.1	1.2	16.9	1.1	13.9
English	6.5	10.5	7.6	4.0	9.3	5.9	4.7	9.3	6.9	9.4	12.9	10.8	1.2	3.8	1.7
Health Related	2.0	15.9	5.9	1.7	17.6	7.3	1.1	16.8	8.8	2.1	22.2	10.0	2.0	18.5	5.2
History or Political Science	7.0	2.7	5.8	5.9	3.4	5.0	8.0	3.8	6.0	6.5	2.8	5.1	4.3	2.8	4.0
Humanities	7.9	7.9	7.9	5.2	6.2	5.6	3.9	3.4	3.7	15.9	9.8	13.5	3.3	8.7	4.3
Fine Arts	9.4	8.0	9.0	6.4	5.4	6.0	7.8	6.1	6.9	8.6	3.3	6.5	4.2	4.2	4.2
Mathematics or Statistics	6.3	4.9	5.9	7.7	7.0	7.5	4.6	7.2	5.8	4.7	5.8	5.1	12.0	9.4	11.5
Physical Sciences	8.6	2.1	6.8	8.6	1.7	6.1	5.9	0.5	3.3	1.9	2.3	2.1	13.1	5.6	11.6
Social Sciences	12.4	10.4	11.8	15.3	13.8	14.8	16.0	13.9	15.0	21.2	12.1	17.6	11.9	13.8	12.3
Other Technical	4.1	2.8	3.7	4.4	1.4	3.4	2.8	1.3	2.1	3.0	1.1	2.2	5.5	2.8	4.9
Other Nontechnical	5.8	8.4	6.5	6.7	8.2	7.2	9.6	7.9	8.7	7.2	5.9	6.7	4.2	10.2	5.4

Source: Higher Education Research Institute, "1989-90 Faculty Survey."

[a] Less than 0.05 percent.

[b] Asian American includes Pacific Islanders.

Table 23
Part-Time Faculty in Higher Education by Race/Ethnicity and Sex, 1979, 1983, 1985, and 1989

Percent	1979 Total	Percent	1983 Total	Percent	1985 Total	Percent	1989 Total	Percent	Change 1979-89
Total Part-time	239,787	100.0	260,647	100.0	264,473	100.0	275,207	100.0	14.8
Men	152,288	63.5	157,347	60.4	155,725	58.9	153,490	55.8	0.8
Women	87,499	36.5	103,300	39.6	108,748	41.1	121,717	44.2	39.1
Minority	24,630	10.3	26,364	10.1	27,102	10.2	30,907	11.2	25.5
Men	14,777	6.2	15,484	5.9	15,555	5.9	17,227	6.3	16.6
Women	9,853	4.1	10,880	4.2	11,547	4.4	13,680	5.0	38.8
White (non-Hispanic)	215,297	89.8	118,041	45.3	237,371	89.8	244,300	88.8	13.5
Men	137,511	57.3	25,621	9.8	140,170	53.0	136,263	49.5	-0.9
Women	77,786	32.4	92,420	35.5	97,201	36.8	108,037	39.3	38.9
African American (non-Hispanic)	12,047	5.0	13,041	5.0	13,284	5.0	13,053	4.7	8.4
Men	6,480	2.7	6,822	2.6	6,774	2.6	6,537	2.4	0.9
Women	5,567	2.3	6,219	2.4	6,510	2.5	6,516	2.4	17.0
Hispanic	5,835	2.4	5,846	2.2	6,050	2.3	7,912	2.9	35.6
Men	3,667	1.5	3,509	1.3	3,621	1.4	4,446	1.6	21.2
Women	2,168	0.9	2,337	0.9	2,429	0.9	3,466	1.3	59.9
Asian American[a]	6,134	2.6	6,386	2.5	6,945	2.6	8,820	3.2	43.8
Men	4,188	1.7	4,375	1.7	4,690	1.8	5,591	2.0	33.5
Women	1,946	0.8	2,011	0.8	2,255	0.9	3,229	1.2	65.9
American Indian[b]	614	0.3	1,091	0.4	823	0.3	1,122	0.4	82.7
Men	442	0.2	778	0.3	470	0.2	653	0.2	47.7
Women	172	0.1	313	0.1	353	0.1	469	0.2	172.7

Source: U.S. Equal Employment Opportunity Commission, "EEO-6 Higher Education Staff Information" surveys, 1979, 1983, 1985, and 1989.

Note: Details may not add to total because of rounding. Because of reporting differences in 1989 data, part-time faculty figures do not include 52 institutions that are included in other 1989 EEOC figures. Employment counts are based on the following number of higher education institutions for each year: 2,879 in 1979; 3,011 in 1983; 2,868 in 1985; and 3,452 in 1989. Data are based on reported counts and are not imputed for nonreporting institutions.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

Table 24
Full-Time Administrators by Race/Ethnicity and Sex, 1979, 1983, 1985, and 1989

	1979 Total	Percent	1983 Total	Percent	1985 Total	Percent	1989 Total	Percent	Percent Change 1979-89
Total	107,448	100.0	117,486	100.0	120,585	100.0	137,561	100.0	28.0
Men	78,022	72.6	79,340	67.5	78,252	64.9	84,382	61.3	8.2
Women	29,426	27.4	38,146	32.5	42,333	35.1	53,179	38.7	80.7
White (non-Hispanic)	96,668	90.0	105,420	89.7	107,162	88.9	120,111	87.3	24.3
Men	71,177	66.2	72,126	61.4	70,472	58.4	75,045	54.6	5.4
Women	25,491	23.7	33,294	28.3	36,690	30.4	45,066	32.8	76.8
Total Minority	10,780	10.0	12,066	10.3	13,423	11.1	17,450	12.7	61.9
Men	6,845	6.4	7,214	6.1	7,780	6.5	9,337	6.8	36.4
Women	3,935	3.7	4,852	4.1	5,643	4.7	8,113	5.9	106.2
African American (non-Hispanic)	7,969	7.4	8,362	7.1	9,124	7.6	11,796	8.6	48.0
Men	4,872	4.5	4,727	4.0	5,003	4.1	5,997	4.4	23.1
Women	3,097	2.9	3,635	3.1	4,121	3.4	5,799	4.2	87.2
Hispanic	1,522	1.4	2,040	1.7	2,401	2.0	3,183	2.3	109.1
Men	1,095	1.0	1,386	1.2	1,553	1.3	1,860	1.4	69.9
Women	427	0.4	654	0.6	848	0.7	1,323	1.0	209.8
Asian American[a]	959	0.9	1,234	1.1	1,398	1.2	1,980	1.4	106.5
Men	637	0.6	790	0.7	873	0.7	1,191	0.9	87.0
Women	322	0.3	444	0.4	525	0.4	789	0.6	145.0
American Indian[b]	330	0.3	430	0.4	500	0.4	491	0.4	48.8
Men	241	0.2	311	0.3	351	0.3	289	0.2	19.9
Women	89	0.1	119	0.1	149	0.1	202	0.1	127.0

Source: U.S. Equal Employment Opportunity Commission, "EEO-6 Higher Education Staff Information" surveys, 1979, 1983, 1985, and 1989.

Note: Details may not add to total because of rounding. Employment counts are basedon the following number of higher education institutions each year: 2,879 in 1979; 3,011 in 1983; 2,868 in 1985; and 3,452 in 1989. Data are based on reported counts and are not imputed for nonreporting institutions.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

Table 25
Other Full-Time Employees by Race/Ethnicity and Sex, 1979, 1983, 1985, and 1989

	1979		1983		1985		1989		Percent Change 1979-89
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	
Total	914,703	100.0	984,926	100.0	982,965	100.0	1,127,305	100.0	23.2
Men	355,446	38.9	379,498	38.5	374,540	38.1	422,388	37.5	18.8
Women	561,279	61.4	605,464	61.5	608,425	61.9	704,917	62.5	25.6
White (non-Hispanic)	704,781	77.1	752,068	76.4	759,874	77.3	842,393	74.7	19.5
Men	270,753	29.6	288,016	29.2	282,653	28.8	313,927	27.8	15.9
Women	434,028	47.5	463,988	47.1	463,033	47.1	528,466	46.9	21.8
Total Minority	209,922	22.9	232,958	23.7	250,323	25.5	268,564	23.8	27.9
Men	82,671	9.0	91,482	9.3	99,568	10.1	100,348	8.9	21.4
Women	127,251	13.9	141,476	14.4	150,936	15.4	168,216	14.9	32.2
African American (non-Hispanic)	153,793	16.8	165,114	16.8	163,763	16.7	185,256	16.4	20.5
Men	56,895	6.2	60,606	6.2	58,573	6.0	64,610	5.7	13.6
Women	96,898	10.6	104,508	10.6	105,190	10.7	120,646	10.7	24.5
Hispanic	32,824	3.6	39,430	4.0	42,519	4.3	55,968	5.0	70.5
Men	15,929	1.7	18,494	1.9	19,738	2.0	25,200	2.2	58.2
Women	16,895	1.8	20,936	2.1	22,781	2.3	30,768	2.7	82.1
Asian American[a]	19,532	2.1	23,417	2.4	25,826	2.6	37,955	3.4	94.3
Men	8,189	0.9	9,692	1.0	11,058	1.1	16,213	1.4	98.0
Women	11,343	1.2	13,725	1.4	14,768	1.5	21,742	1.9	91.7
American Indian[b]	3,767	0.4	4,997	0.5	5,171	0.5	5,860	0.5	55.6
Men	1,658	0.2	2,690	0.3	2,518	0.3	2,438	0.2	47.0
Women	2,109	0.2	2,307	0.2	2,653	0.3	3,422	0.3	62.3

Source: U.S. Equal Employment Opportunity Commission, "EEO-6 Higher Education Staff Information" surveys, 1979, 1983, 1985, and 1989.

Note: Details may not add to total because of rounding. Employment counts are based on the following number of higher education institutions each year: 2,879 in 1979, 3,011 in 1983, 2,868 in 1985, and 3,452 in 1989. Data are based on reported counts and are not imputed for nonreporting institutions.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

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One Dupont Circle
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